KUAKATA TOURISM CENTRE MASTER PLAN

Development Promotion & Control Guidelines for Kuakata Tourism Centre

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Urban Development Directorate

Ministry of Housing & Public Works

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ABBREVIATION AND ACRONYMS

| ктс | Kuakata Tourism Centre |
|-------|---|
| AC/ac | Acre |
| TSZ | Tourism Service Zone |
| BAZ | Beach Activity Zone |
| PKDA | Payra Kuakata Development Autghority |
| PT | Public Toilet |
| CS | Cyclone Shelter |
| STS | Secondary Transfer Station |
| EHR | Emergency Health Response Point |
| ETZ | Exclusive Tourist Zone |
| CBD | Central Business District |
| CUA | Core Urban Area |
| DMDP | Dhaka Metropolitan Development Plan |
| EPZ | Export Processing Zone |
| EUA | Existing Urban Area |
| GC | Growth Centre |
| GIS | Geographic Information System |
| GoB | Government of Bangladesh |
| WDB | Water Development Board |
| LGED | Local Government Engineering Department |
| NUA | New Urban Area |
| UAP | Urban Area Plan |
| R&HD | Roads and Highway Department |
| DC | Deputy Commissioner |
| ROW | Right of Way |
| ToR | Terms of Reference |
| Nos | Numbers |
| PWD | Public Works Department |
| UDD | Urban Development Directorate |
| | |

GLOSSARY

| Khas | : | State owned land not specifically allocated to any government agency |
|---------------|---|--|
| Paurashava | : | Municipality |
| Kucha | : | Impermanent structure/building materials |
| Pucca | : | Permanent Construction/Structure using bricks, cement etc |
| Shahar | : | Smaller urbanized area/secondary town |
| Slum | : | General term, also used to designate urban poor renting private land |
| Squatter | : | Unauthorized inhabitant of public/government land |
| Mouza | : | Definite area demarcated and identified by the revenue department with a |
| | | jurisdiction list number. It may be populated or de populated |
| Village | : | Smallest geographic area of rural area. A village may be same as mouza |
| | | or there may be more than one village in a mouza. It is always populated |
| Ward | : | Smallest local administrative (local govt. unit) unit of urban area. For the |
| | | operational convenience municipalities area divided into three or more |
| | | wards. The ward boundaries are specified by gazette. A ward has a ward |
| | | parishad (council) |
| Mahollah | : | Smallest identifiable area with settlements of homogeneous group of |
| | | people. |
| Para | | Smallest identifiable area with settlements of indigenous group of people. |
| Union | : | Smallest local administrative unit (local govt. unit) of rural area which is |
| | | composed of mouzas and villages. A union has a union parishad |
| Upazila/Thana | : | Sub-district Administrative Area |
| Zila/District | : | District Administrative Area |
| Dighi | : | Larger ponds/ tanks mostly excavated in the past by influential personnel |
| | | and rulers |

Executive Summary

Kuakata has every types of tourism potentially like eco-tourism, cultural tourism, leisure tourism, sports tourism & educational tourism etc. Along with the sunrise & sunset view one can trail through the beach & natural forest; wander through the home of red crab & enjoy closely the ethnic culture. Again, the physical development & mega project like Padma bridge, Payra port, Thermal powerplant has fasten the urbanization rate at this part of the country. At present Kuakata has become the number one choice for sea lovers in comparison with its counterpart Cox's bazar due to travel time & cost because the communication milestone Padma bridge in operation now. Hence, there is a chance of haphazard development & urban sprawl here. Again, the potentiality of this place is enormous but very few has been explored yet. Considering the importance & sky-high potentiality of this area, Government has declared this area as Kuakata Tourism centre (KTC) through earlier KTC Master Plan in 2014. The period of the earlier KTC Master plan has been over by 2020. Therefore, to control the unplanned growth & to explore the unavailing parts of tourism & ecotourism potentials of KTC area '**Urban Development Directorate (UDD)**' has initiated to prepare a KTC master plan for upcoming 10 years plan period under the project named "**Payra Kuakata Comprehensive Plan Focusing on Ecotourism**".

Kuakata Tourism Center (KTC) Area is not simply a small-town center. It contains Kuakata municipal area, entire part of Latachapli union & a part of Dhulashar union. Consequently, it's a combination of urban & rural intrinsic context with strong tourism effect. It needs to consider & calculate tourist people along with the local community or age-old residence. Therefore, KTC masterplan is somewhat different than other Urban Area Plan. The plan has an integrated approach targeting the tourists as well of the local people's embodying tourism development as well as socio-economic development respectively. From this perspective, the plan is a unique work out of serving the dual purposes. It's not a typical Urban Area or Rural area plan; rather it can be said as '**Special Area Plan'**.

This plan is also a nice blend of development promotion & development control. Various proposal has been given in this master plan promoting tourism & eco-tourism in KTC & strengthening local economy & create more job opportunities. As communication is the key nowadays so a well-connected transportation network has been proposed in consideration with the function & traffic volume of the particular road together with easier mobility to the local attraction point. A marine drive proposal has also been given in this plan to enjoy the vibe of sea. Besides the transportation proposal this plan suggest various activity & physical infrastructure like Sea aquarium, Seafood & crafts market, Picnic spot, Golf Course, Stadium, Sports Complex, Cultural History Museum, Auditorium & Public Event venue, Exclusive Tourist Zone & Ecotourism & tourism Village zone and Park & Open Spaces etc.

Along with various promotional proposal this plan imposes some development control through Strategic Planning Zone (SPZ) in different parts of KTC area. To avoid horizontal development along the sea & urban sprawl close to beach a height restriction from the sea shoreline has also been imposed into different parts

of the area. Again, a clear land use with the permissible & non permissible act in each Planning zone along with necessary guidelines to protect the sea beach, reserve forest, agricultural land & ecologically sensitive area is also specified in this plan.

This Plan Well-thought-out the Padma bridge impact together with various development projects & upcoming mega projects in this region like six lane regional road, Railway line, airport etc. while calculating the number of tourist & required tourism-ecotourism services. Various survey including Physical feature, Transportation, Hydrology & Geological, Socio economic survey, have been carried out during the project period to diagnose the existing condition of each sector & took measures to combat the issue accordingly.

Kuakata Tourism Centre (KTC) master plan will certainly act as a guiding principle in terms of development promotion & development control through proper implementation.

CHAPTER ONE: BACKGROUND OF KTC MASTERPLAN

1.1 Background of the Study

Kuakata is not simply a sandy beach, this place has every types of tourism potentially like eco-tourism, cultural tourism, leisure tourism, sports tourism & educational tourism etc. From here you can enjoy the sunrise & sunset together. Again, you can trail through the beach & natural forest, wander through the home of red crab & enjoy closely the ethnic community culture. The physical development & mega project like Payra port, thermal powerplant has fasten the urbanization rate here. Haphazard development has also been taken place here & there. Again, the Padma bridge has act as a communication milestone for the southern part of the country. It has affects directly Kuakata by cutting travel time & hassle of the tourist. At present Kuakata has become the number one choice for sea lovers in comparison with its counterpart Cox's bazar because of the travel time & cost. Considering the importance & potentiality of this area Bangladesh government has declared this area as Kuakata Tourism center (KTC) in 2014 through a gazette notification. Again, the sky-high potentiality of this region in terms of tourism & increasing rate of urbanization due to recent mega projects & Physical development the Urban Development Directorate (UDD) has initiated "Preparation of Payra Kuakata Comprehensive Plan Focusing on Ecotourism" Kuakta tourism center (KTC) area lies within the project boundary. This is how Kuakata tourism center (KTC) master plan comes into part. The potentiality of this place is enormous but very few has been explored yet. That's why this plan Kuakta Masterplan comes into part. Through this KTC Masterplan government wants to explore the unavailing parts of tourism potentiality of this particular area & use the most of Kuakata's resources and opportunities, and to address the constraints so that KTC area could be found as an enhanced tourism spot with the full capacity of its seafront; heritage, culture & other local attraction point. By generating more tourism & eco-tourism event KTC could be a hot spot of local & international tourist. At 2008-2009 period the road network of kuakata was very poor. There were several numbers of ferries in the way to kuakata; four ferries even from Barisal. Things have been changed over the years there is no ferry right now; again, road network is much better than earlier. Most importantly the Padma bridge, the communication milestone in southern Bangladesh is in operation now. Things are now quite different. During the peak season number of daily tourists is quite larger than that of yearly tourist earlier. The big investor keeps their eye in this region to invest more & thus the economy of the region is also growing larger. But there is chance of haphazard infrastructure development. Thus, KTC master plan will give a strategic Planning Zone, Landuse Plan & transportation plan & action plan so that development promotion & development control can go through hand by hand. The plan has an integrated approach targeting the tourists as well of the local people's embodying tourism development as well as socio-economic development respectively. From this perspective, the plan is a unique work out of serving the dual purposes. It's not a typical Urban Area or Rural area plan; rather it can be said as 'Special Area Plan'.

1.2 Aim & Objectives

With the aim of providing a sound spatial framework for Kuakata to develop tourism activities within the context of effective development promotion & control strategies so as to ensure ecological and cultural sustainability the following objectives needs to be achieved through KTC Master Plan.

- Carry out a strategic planning zone & Land use plan for KTC area to regulate & control urban sprawl
- Recommend a Planned Transportation network in KTC area to ease regional & local mobility
- Explore new tourism ideas/events & endorse eco-tourism services/facilities at KTC area
- Safeguard local ethnic intriguing culture & promote community tourism
- Deliver guidelines for sustainable use of agricultural area, Reserve forest area, potential beach areas & Ecologically sensitive area.

1.3 Area Demarcation

Kuakata Tourism Centre (KTC) area covers the Kuakata Paurashava, entire part of Lata Chapli Union and some parts of Dhulasar Union including Char Chapli mouza, Gangamati mouza and Kawar Char mouza. The proposed site of Kuakata Tourism Centre occupies an area of about 82.5sq.km.

| Location | Area (Sq km) |
|----------------------|--------------|
| Kuakata Municipality | 5.02 |
| Latachapli Union | 53.62 |
| Dhulasar Union | 23.86 |
| Total | 82.50 |

Table 1.1: Area of Kuakata Tourism Centre

Kuakata Toursim Center (KTC) contains the following mouza & mouza sheet according to State Acquisition Survey.

Table 1.2: Mouza Schedule of KTC Area

| Mouza Name | JL No | Sheet No |
|-------------|-------|-------------|
| Char Chapli | 36 | 1,2,3,4,5 |
| Gangamati | 35 | 1,2,3,4,5,6 |
| Kawar Char | 37 | 1,2,3,4 |
| Lata Chapli | 34 | 1 to 27 |

1.4 National & Regional Setting

Kuakata is located at the southernmost tip of Bangladesh. The name originated from the word kua and kata, which means to find & store drinking water. In the vicinity of the Buddhist temples located Keranipara, Misripara and Amkholapara. Kuakata is a famous pilgrimage place of the Hindus and the Buddhists.

Kuakata locally known as Sagar Kannya (Daughter of the Sea) in Lata Chapli union as well as Dhulasar union (part) under Kalapara upazila of Patuakhali district is 70 km away from Patuakhali district headquarters;120 km from Barishal divisional town and 320 km from Dhaka city, the capital of Bangladesh. The approximate length & breadth of Kuakata Tourism Center (KTC) is 30 km and 6 km respectively.

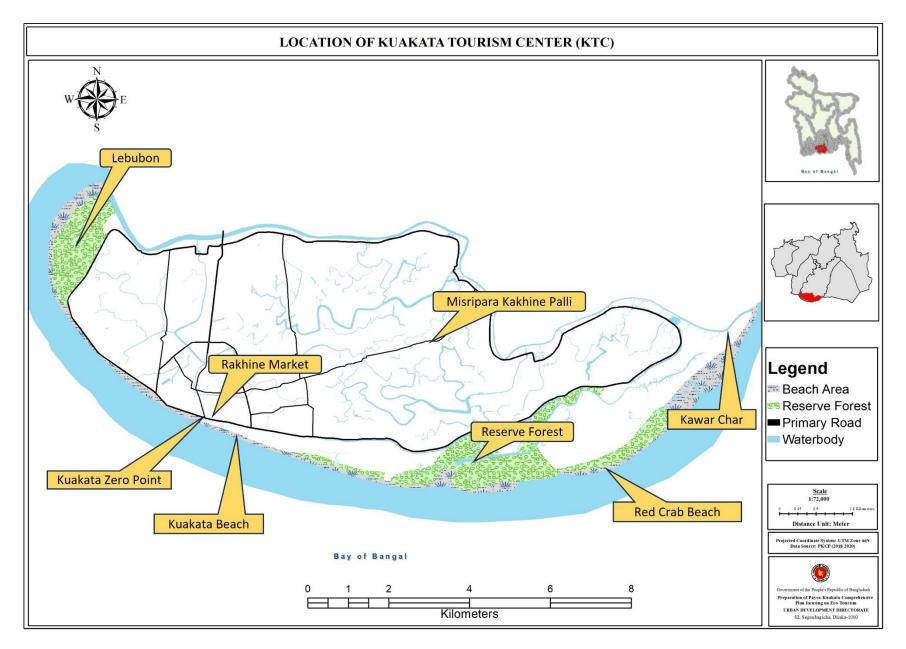
The Kuakata Tourism Centre is bounded to the south by the Bay of Bengal, to the North by the Khapravanga river and to the west by Taltoli upazila & to the east by Ramnabadh channel. Kuakata has excellent combination of the picturesque natural beauty, sandy beach, blue sky, huge expanse of water of the Bay of Bengal and evergreen forest of the Sundarbans is really eye-catching.

Kuakata is one of the rarest places which has the unique beauty of offering the full view of the rising and setting of crimson sun in the water of the Bay of Bengal in a calm environment. That perhaps makes Kuakata one of the world's unique beaches. The long and wide beach at Kuakata has a typical natural setting. This sandy beach has gentle slopes into the Bay of Bengal and bathing there is as pleasant as is walking or diving.

Besides the stunning beach area Kuakata area contains very spectacular local attraction point which have sturdy tourism potentiality & tourist used to go & enjoy those places. The main local attraction points are as follows;

- Sunrise and Sunset point on the beach
- Jhaubon alongside the beach
- Lemur Char & Fatrar char
- Gangamotir Char, the home of red crab
- Kawar char, the eastern part of KTC
- Misripara Rakhain Village.
- Rakhaine market, the indigenous craft market etc

However, the proposed site of Kuakata Tourism Centre occupies of about 82.5 sq.km area. Among which, Pourashava comprises about 5.02 sq.km area, Lata Chapli union covers about 53.62 sq.km and Dhulasar union about 23.86 sq.km areas.



Map 1.1: Location of Kuakata Tourism Centre

CHAPTER TWO: CRITICAL PLANNING ISSUES

2.1 Critical Planning Issues

In the way development every place is bound to overcome some challenges & come across some opportunities. Kuakata tourism center (KTC) is not at all exceptional; in the area of tourism development, it also faces the following Issues.

Horizontal Development along the Sea

In Bangladesh People have the common tendency to build giant infrastructure close to sea. It is not viable to accommodate all the investor close to the sea. This horizontal development will make the people suffer who have parcel of land a bit far from the sea. They don't have the chance to enjoy the beauty of the sea from their place due to large infrastructure between the sea & their place. It needs to addressed through vertical connection to the sea & imposing height zoning. The closer you are the less height you will get.

> Beach Erosion & Beach Encroachment

Kuakata is facing severe beach erosion since last few years. Beach erosion is quite sweeping at the western part & very entry point popularly known as zero point. Last five years almost 1km land has been washed away into the sea at this part. The eastern part, Gangamoti & kawar char is comparatively less eroded zone. Some temporary solution like sandbag installation has been taken by water Development Board, but it's not at all enough. KTC Masterplan has suggested few temporary & few sustainable measures like sea wall, Breakwater, Groynes, Revetment, sand replenishment & Bio engineering intervention. Amongst all Breakwater & Rebatement is temporarily effective but sand replenishment is more effective & less costly in the long run for Kuakata. The responsible authority more specifically water development board should choose the effective measure from the above mentioned by considering cost & other parameter with their capacity.

Single Entry to the Sea & Urban Sprawl at Zero Point

The only way to enter into the kuakata beach is Barisal-kuakata high way. This single-entry issue is indeed a major obstacle in the way of development as a tourist attraction spot. This is responsible for urban sprawl & haphazard development close to this entry point. It should be stopped right now. This KTC plan proposed some other 80 feet entry point vertically connected to the sea. The unauthorized market at the present entry point should be removed & need to be rehabilitated into the commercial zone. Again, the Barisal-Kuakta highway point needs to be widen & this plan propose also in the same way. The newer entry points start from proposed Bangabandhu square & ends with different places at the beribadh (Map 5.2). Tourist come through Dhaka-Kuakta highway & at the proposed Bangabandhu square they will divide according to the location of their accommodation.

Limited Events

Watching the sea & taking bath into the sea water is the only event in Kuakata at present. With this only event it cannot make the tourist stay longer. Tourist come here with amount of money to spend but they don't have the chance to do so; they get bored with single event & make their tour shorter. Thus, the amount

of money flow into the local market from other parts of the country even abroad is not getting larger. To boom up the local economy & to create job opportunities in KTC area there is no alternative to make the tourist attracted to come here & stay longer period by creating various events. Regarding the event generation KTC master Plan has given various ideas & explored different events based on tourism & ecotourism activities. River & Sea cruising, Jungle & Canal Safari, Community Tourism, living on water (Flotel) could be some new unexplored event here. In KTC plan we have fixed up a route for sea cruising & river cruising depending upon the season & weather condition. Besides this some physical & infrastructural proposal like Sea aquarium, Amphitheatre, planned fish & crafts market, Children park & Zoo, Cultural history museum has been provided to promote & generate events. Again, there are some places with eco-tourism potentiality has been defined as Eco-tourism & tourism village zone where Luxury/budget tent & resort will be available. For the foreign tourist an exclusive tourist zone is proposed at the very eastern part of KTC area (Map 4.13).

- Golf Course (18 holes)
- Sports Complex
- > Stadium
- Marine drive
 Sea Aquarium & Museum
 Rakhain Village (Pally)
 Planned sea food market
- Marine Park
- Amphitheatre

- Eco Resort & Villa Zone
- Exclusive Tourist Zone
- General Tourist Zone

- Crafts market
- Children park & Zoo
- Eco-Parks Jungle & canal safari
- River & sea cruising route
- Watch Tower

Watch Tower

- Picnic spot
- Luxury Tent

Poor Regional & Local Connectivity

At present the only communication network of KTC is road network. As a significant tourist spot kuakata lacks multiple lane expressway, railway & airway connectivity. This three-layer connectivity will enhance the regional connectivity & will give the tourist alternative way of modal choice. Therefore, in the Regional plan, the upper tier of KTC Master plan six lane express way, Railway network & airport adjacent to Payra port has been proposed to address the regional connectivity. Again, within the KTC area the local mobility is also not very sound. The road network between the local attraction point is not up to the mark. In KTC plan there is a specific road network proposal is given in terms of mobility among local attraction point. (Map 5.2)

The Padma Bridge Impact

The Padma Bridge is the key communication milestone of the southern part of the country. After constructing Padma bridge the regional connectivity condition has been improved in terms of Road & rail connectivity. A person residing at the capital wants to enjoy the sea has two options; one is Coxsbazar & the other one is Kuakta. At this moment for the Padma bridge impact Dhaka-kuakta distance is 130 km & 2 hours shorter than that of Dhaka-Cox'sbazar respectively. Number of daily tourist come to Kuakata after the Padma bridge is significantly larger than that of earlier when ferry is the only way to cross The mighty Padma.

> Sunrise & Sunset Views

There is some beach in the world from where you can see either the Sun set or the Sun rising scene but kuakata is the only place where you can enjoy both Sunset & Sun rise views. Literally one can enjoy the Sunrise view from the Eastern part of the beach locally named as Gangamotir char & Sun set views from the western part of the beach locally named as lemur bon. In KTC master plan Two watch Tower has been proposed in these two points.

> Community & Ethnic Culture (Rakhaine)

An ethnic group locally named Rakhaine people stays at different parts of the region like kalapara, Barguna & Taltoli upazila. A large number of them have been staying at KTC area for long period of time. They have a very unique life style & culture. Their habitat, food, dress & even language is different from mainstream Bangladeshi people. They used to produce handicrafts & cloths in the very indigenous way. People from outside feel interest of their culture & products produced by them. This community & ethnic culture is a nascent element for KTC area in terms of tourism development. This Community culture & product needs to be marketed properly so that more people know it; want to enjoy this unique ethnic culture. Most of the Rakhine people reside at Misripara & there is a large temple here. Misripara & adjacent place has been declared as the "Area of Ethnic Characteristics" with some specific regulation & development proposal (Map 4.13)

> Eco -Tourism Elements

Kuakata Torism Center (KTC) area is full with various Eco tourism nitty-gritties. There is large amount of reserve forest in different parts of the area. In western part the densely reserve forest is named as 'lebur bon" & another part is situated at Gangamotir char named as "Gangamoti reserve forest". These reserve forest could be an interesting place for eco-tourism activities like jungle safari, Tree housing, Tenting, Hiking or Trekking, Kayaking or boating & Trailing etc. Again, the canal flown into the reserve forest is very useful for canal safari & boating or kayaking. The structural development like boat jetty & canal side sitting/ resting arrangement is needed there. Again, the Tengragiri wildlife Sanctuary local name "Fatrar Char" located just the opposite side of Lebur Bon has diversified kinds of trees & animals is one of the key attraction points for tourist in this region. Now tourist used to go there by fiber boat & trailer. In KTC masterplan there is proposal of cable car between Lebur bon & Fatrar char. Watch tower & wooden trail could be also very useful in reserve forest. It is obviously an outstanding scene that red crab hiding themselves into the grotto & wandering here & there while visiting Gangamotir char.

- Horizontal Development along the Sea
- Beach Erosion & Beach Encroachment
- Single Entry to the Sea & Urban Sprawl
- Limited number of Events
- Poor Regional & Local Connectivity

- The Padma Bridge Impact
- Local Attraction Point
- Community & Ethnic Culture
- Eco Tourism Elements
- Sunset & Sunrise view

CHAPTER THREE: POPULATION PROJECTION & PLANNING STANDARD

3.1 Resident Population Projection

Kuakata Tourism Centre area covers the Kuakata Paurashava, Lata Chapli Union and a part of Dhulasar Union (Char Chapli mouza, Gangamati mouza and Kawar Char mouza). The proposed site of Kuakata Tourism Centre occupies an area of about 82.5sq.km. We have BBS Data of 2011 & 2022 for each administrative unit. But population of a particular part of Dhulasar union is not given at BBS. To calculate those population a customized way needs to apply.

Total number of population at Dhulasar Union at 2022 is 22,764 nos & the number of households according to PKCP data at Dhulasar Union is 5071. Therefore, each Household Size will be (22764/5071) or 4.5 approximately. Again, the Number of households of Dhulasar union of KTC area is 2549. This number is multiplied by the household size then the number of Population of Dhulasar Union at KTC area is 11470.

3.2.1 Projection Method

There are various methods of Population projection; here linear projection process has been trailed by the following way;

Projected Population = Current Population + (Annual Population Change * Number of Years) Again, to calculate the annual population change, you can use the following formula;

Annual Population Change = (Population at Future Year - Population at Starting Year) / (Number of Years)

| Administrative Boundary | Population (2011) | Population (2022) | Population (2031) | Population (2041) |
|----------------------------|----------------------|----------------------|----------------------|----------------------|
| Kuakata Paurashava | 9177 | 13657 | 17322 | 21395 |
| Latachapti Union | 25925 | 28606 | 30800 | 33237 |
| Dhulasar Union (KTC) | 9170 | 11470 | 13303 | 15433 |
| Population (KTC) | 44,272 | 53,733 | 61,425 | 70,065 |

Table 3.1 Population Projection of KTC Area

To calculate the required land for the residential & Educational use the resident population projection will consider only. On the other hand, to know the required land for other use we have to consider the resident population along with projected number of tourists as well. Here we need to consider the daily maximum number of tourist because tourist come for a day or for a few days then replaced by another tourist. Therefore, cumulative number of the tourist for the year is meaningless to consider any service or use

3.2 Tourist Population Projection

3.2.1 Tourist Projection at Earlier KTC Master Plan

To calculate tourist growth rate is not easy; there is no hard & fast rule to follow. It was the survey data surveyed at 2008 & 2009 respectively. They got 2008 at year 18000 & at 2009 year 22000 then they calculated the tourist growth rate of each year by the following way

Tourist growth rate =

No. of tourist visited in the present year - No. of tourist visited in the previous

X 100

No. of tourist visited in the previous

= {(22000-18000)/18000} *100 = 22.22%

| Year | Number of Tourist | Growth Rate | |
|------|-------------------|--------------------------|--|
| 2008 | 18000 | | |
| 2009 | 22000 | 22.22% | |
| 2010 | 26888 | | |
| 2015 | 34954 | Expected growth rate 30% | |
| 2020 | 45441 | | |
| 2025 | 61345 | Expected growth rate 35% | |
| 2030 | 84656 | Expected growth rate 38% | |

Source: KTC master Plan; Survey period (2008-2009)

At 2008-2009 period the road network of kuakta was very poor. There were lots of ferries in the way to kuakata; four ferries even from Barisal. Things have been changed over the years there is no ferry & road network is much better than earlier. Most importantly the Padma bridge, the communication milestone in southern Bangladesh is in operation now. Things are now quite different now. During the paek season number of daily tourists is quite larger than that of yearly tourist earlier.

3.2.2 Tourist Projection at 2023

Tourist projection is not quite similar at normal population projection. To provide services & facilities Population should be calculated yearly because they used to stay throughout the year in that particular Place. On the other hand, Tourist come a tourist spot & stay either a day or few days & then replaced by another tourist. Therefore, in terms of tourist service providing the service provider need to know the daily demand or amount of the tourist instead of yearly projection. To find out the number of tourists we have taken key informant survey from Tour operators association & Hotel motel owners association. We also did number of PRA with different group of people to find out actual number of tourists come here & the associated service they demand. From 2022 after the grand opening of The Padma bridge, the communication milestone of southern Bangladesh things is being changed drastically. Tourist come quite

large in number here. At present during peak season almost 50,000 tourists come daily according to the tour operators & Hotel owners association. Most of them said that the entire year should be segmented into Two tourist season; that is peak & off peak. September to March is the peak & remaining six months is considered as the off-peak season. At present after installing The Padma Bridge, Other bridges & better road network; the amount of tourist comes daily;

Table 3.3 Daily Tourist in KTC area

| Peak Season (September - March) | Off peak Season (April - August) |
|---------------------------------|----------------------------------|
| 50,000 - 70,000 | 10,000 - 12000 nos |

3.2.2.1 Assumption for Future Tourist Forecast in KTC

- 1. Dhaka -kuakata six lane road
- 2. Rail line in KTC Area from Different parts of the country
- 3. Airport in this region
- 4. Different new Events in KTC area for tourist attraction
- 5. No negative effects (natural/manmade)

Table 3.4 Daily tourist projection

| Year | Number of Tourist in Peak Season (Daily) | Growth rate | Remarks |
|------|---|-------------|---------------------------------|
| 2023 | 50,000-70,000 | | Padma Bridge & other bridge |
| 2028 | 60,000-84000 | 20% assume | Assumption 1 & 2 in operation |
| 2033 | 62,500-87500 | 25% assume | Assumption 1,2 & 3 in operation |
| 2041 | 67,500-94500 | 35% | Every Assumption taken place |

This is a very hypothetical projection; it has been predicted that after 10 years from now daily tourist in KTC will be close to 1 lakh assuming the fact of six lane Dhaka- kuakata highway, Railway line & airport in this region & various events at KTC area is in operation.

3.3 Review of Planning Standard

Urban Planning Standards in Bangladesh are not comprehensive, well-articulated and well compiled. They are scattered in different acts, plans, reports, rides and even in executive orders. Some of these standards, as incorporated in acts and in some plans, are statutory in nature. However, irrespective of their strength of enforceability, level of compliance is extremely low due to slack in enforcement administration Different plan uses different standard. The following table will give a clear picture about the fact.

| | Standards in Recent Metropolitan Plans | | | |
|-------------------------|---|---|--|---|
| Uses | Khulna City Master Plan, 2001-2010 | Dhaka Metropolitan Development Plan, 1995- 2015 | Rajshahi Urban Area Plan | Plan for Barisal Divisional Town |
| Open Space | 1 acre/ 1000 population | 0.16 acre/ 1000 population | 1.5 acres / 1000 population | 1 acre/ 1000 population |
| | | Educat | ion | |
| Primary School | 1 school /7,000 population approx. Area: 0.50 acre to 0.70 Acre | 1 School / 15,000 Population | 1 School / 4000 Population Area: 1 acre to 1.50 acres | 1 school /7,000 population (approx.); 1 acre of land |
| Secondary school | 1 school / 8,000 population approx. Area: 1.50 acre to 1.60 acre | 1 School / 23,000 Population | 1 school /6,000 Population Approx. Area: 2 acres to 3 acres | 1 school / 8,000 population (approx.); 2 acres of land |
| College | One college /36,000 population approx. Area: 10 acres | N/A | One college /30,000 population Area: 10 acres maximum. | 1 college/ 30,000 population (approx.); open space equivalent to one football field |
| Katcha Bazaar | One for Bazar/45,000 population of 0.30 acre each. | One in Each Ward, 0.30 acre each. | One in Each Ward/SPZ in urban area and one for every 50,000 population in extended area. 0.30 acre minimum space for each. | One in Each Ward, 0.30 acre each |
| Neighbourhood Centre | One in Each Ward, 0.30 acre each | One in Each Ward, 0.30 acre each | One for each declared neighborhood, 0.30-acre max. for each. | One in Each Ward, 0.30 acre each |
| Health | 1 bed/ 1000 persons | N/A | 354 persons / bed | 1 bed/ 1000 persons |

Table 3.5: Comparative picture of Planning standard in various Plan

Source: DMDP, (1995-2015); Khulna City Master Plan (2001-2010); Rajshahi & Barisal masterplan

3.3.1 Planning Standard for Kuakata

Kuakata Tourism Center is not just simply a small urban center it is the combination of both union & municipal area having a significant tourist spot. Consequently, the planning standard & Patten will not be quite identical in comparison with other city or urban centers. Here resident people along with tourist both needs to be considered & again some special service might be needed that is might not necessary at other places. By considering all those things the following Planning standard has been fixed up for Kuakata Tourism Center.

| Type of Land Uses | Unit (Recommended Standard Provision) | |
|--|---------------------------------------|--|
| Tourism Service | | |
| Tourist Service Area (Budget) | 100 person/acre | |
| Tourist Service Area (Luxury) | 50 person/acre | |
| Exclusive Tourist Zone | 20 person/acre | |
| Eco-Tourism & Tourism Village | 20 person/acre | |
| Residential | | |
| General residential | 100-150 persons/acre | |
| Real Estate-Public/Private | 150-200 Person/acre | |
| Residential/Rural Homestead | 50 person/acre | |
| Education | | |
| Primary School/ Kindergarten | 2 acres/ 5,000 Person | |
| Secondary / High School | 5 acres/ 20,000 Person | |
| College | 10 acres/ 20,000 Person | |
| Vocational Training /polytechnic Institute Centre | 5 acres | |
| Others (Library, Public library) | 5 acres/ 20,000 Person | |
| Open Space, Sports & Recreational | | |
| Central park | 10 acre | |
| Safari Park | 300-350 acre | |
| Golf Course | 150 acre | |
| Multipurpose Sports Complex (Indoor/outdoor) | 30-40 acre | |
| Cricket Stadium | 20 acre | |
| Neighborhood /Community Park | 1 acre/10,000 Person | |
| Town Hall/ Complex/auditorium & Public Event | 1.5-2.00 acre | |
| Health Facility | | |
| Specialized Hospital | 1 acre/ Paurashava/ Union HQ | |
| Emergency Health Response at Tourist Spot | 1 acre/20,000 person | |
| Maternity/ Child Care Center | 1 acre/ 20,000 Person | |
| Clinic | 0.25/ 20000 Person | |
| Commerce and Shopping | | |
| Wholesale market | 3-5 acres/Paurashava/Union | |

| Retail sale/Kitchen/Neighborhood market | 0.5 acre / 10000 Person | |
|--|-----------------------------|--|
| Market for Indegenous Product | 2 acre (need based) | |
| Industry | | |
| General/ Agro/Cottage Industry | 2.5 acres/10,000 Person | |
| Administration | | |
| Urban Deferred | 10% buildup area/ Dist. HQ | |
| Union office/ complex | 2-5 acres / Union | |
| Pourashava office | 3 acres / Paurashava | |
| Community Facilities | | |
| Mosque/ Church/Temple | 0.5 acre/ 20,000 Person | |
| Eidgah | 2 acres/20,000 Person | |
| Graveyard | 1 acre/20,000 Person | |
| Cremation Ground | 0.5 acre/20000 Person | |
| Community Center/Auditorium | 0.5 acre/20,000 Person | |
| Club/Gymnasium | 0.25 acre/ Optional | |
| Utilities | | |
| Electricity supply/ Electric sub station | 1 acre/20000Person | |
| Water Supply Station treatment plant | 1 acre/20000Person | |
| Gas supply station | 1 acre/20000Person | |
| Waste Disposal Ground & Treatment plant | 5 acres (need based) | |
| Transportation | | |
| Bus terminal | 5 acres (Need based) | |
| Truck terminal | 1.5 (Need based) | |
| Bus Stand | 0.5 acre/20000 Person/Union | |
| Railway station | 50-70 acre (need based) | |
| Government Services | | |
| Police Station | 3-5 acres | |
| Police Box | 0.5 acre | |
| Post Office | 0.5acre | |
| Fish Landing station | 0.5 acre | |
| Fire Service | 1 acre | |
| Telephone Exchange | 0.2 acre | |

In KTC master plan a land requirement has been identified by considering the planning standard mentioned above & then various proposal for various sector has been given accordingly. The required land issue also reflects in the land use proposal & finally in strategic land use zoning.

The required land for Residential & Educational use will be calculated based on projected resident population only, but for other land requirements, the daily number of tourists needs to add with projected resident Population. Again, cumulative tourist number for entire year is pointless because tourist arrives at a tourist place for a day or for few days & then replaced by another.

CHAPTER FOUR: DEVELOMENT PROMOTION & DEVELOPMENT CONTROL

4.1 Strategic Planning Zone

Strategic Planning Zone is the most useful & widely used tools for Promoting Development alongside controlling the haphazard or unplanned one. Strategic Planning Zone is the clearly defined geographical area where explicit uses are permitted & specific uses are restricted. Kuakata Tourism Center (KTC) Area has been separated into the following Strategic Planning Zones;

| Tourist Service Zone | Planned Development Zone | Area with Ethnic Characteristics |
|--------------------------------------|--------------------------|----------------------------------|
| | | |
| Exclusive Tourist Zone | Planned Residential Zone | Area with Tourism Potentiality |
| | | |
| Eco-Tourism&TourismVIllageZone | Mixed Use Zone | Area with Rural Characteristics |
| | | |
| Beach Activity Zone | Sports Zone | Manufacturing & Processing |
| | | |
| River Side Activity Zone | Rehabilitation Zone | Agriculture Zone |
| | | |
| Covt . & Administrative Service Zone | Urban Deferred | Protected Beach Area |
| | – – – | |
| Open Space & Greenery | Reserve Forest Zone | Ecological Sensitive Zone |
| | | |

4.2 Development Promotion & Control Guideline of Each SPZ

4.2.1 Tourist Service Zone

It is the very core part of Kuakata town comprising of 1084-acre land. It is separated into two part by Dhakakuakata highway. This area is used for hotel, motel, resort & tourist accommodation purpose mostly. Besides this there are some people who born & brought here, stay at kuakata municipal area as their ageold residence. In this tourist service zone, the Core commercial zone locally known as kuakata Rakhine market is also located. By the two side of Dhaka- kuakata highway people used to use it as mixed-use purpose; mostly small shop, booking counter & hotel. The tourist service zone is subclassified into three part based on their preferred use. Those are;

- \circ ~ TSZ 01: Tourist Service Zone with Commercial Preference
- o TSZ 02: Tourist Service Zone with Mixed Use Preference
- TSZ 03: General Tourist Service Zone

In fact, it's really very tough to differentiate between TSZ 01 & TSZ 02. Habitually these two parts is somewhat similar in terms of their use. The main use is tourist accommodation like hotel, motel & the other one is Commercial. However, the existing Rakhine market & adjacent area is defined as TSZ 01 & A buffer area by the two side of Dhaka-kuakata highway is termed as TSZ 02; & the rest of the low densely tourist service zone is announced as General tourist zone.

TSZ.01 Tourist Service Zone with Commercial Preference

General Trend & Issues

- Indigenous crafts & clothing market
- Narrow Road
- Shops are not in proper shape
- Temporary structure

Opportunities

- High Demand of indigenous craft & Clothing
- Located at the heart of Tourist service Zone
- Vertical Development Can be possible
- Open Space at the Center
- Elements of Preservation (KUA & Temple)

Action Required

- Widening of the Adjacent Road
- Permanent shop with same shape & Design maintaining local culture
- Install architectural element on the open space (Nature based solution preferred)
- Comfortable sitting arrangement waiting zone with women & child corner & Public toilet
- Preserve Kua & Temple area

TSZ.02 Tourist Service Zone with Mixed Use Preference

General Trend & Issues

- Located by the two side of Dhaka-kuakata highway
- Bus stoppage on the Road
- Numbers of booking counter & restaurant
- Structure close to road
- Structure doesn't have proper permission from proper authority

Opportunities

- Located at the main entry of Tourist service Zone
- Vertical Development is possible

Action Required

- Widening of the Dhaka- Kuakata highway (80 feet carriage way)
- Bus stoppage is not allowed on the road
- Structure not permitted close to road (Building construction Act, BNBC)
- No footpath marketing allowed
- Impose No permission No structure theory
- Zero-point needs to made free from commercial sprawl (Clear sea view needed)

TSZ 03 General Tourist Service Zone

General Trend & Issues

- Generally, Hotel, Motel & Tourist Accommodation area
- Less densely in comparison with TSZ-01 & TSZ-02
- Residential use of age-old residents
- Narrow Road
- Tendency of constructing structure close to road
- Structure doesn't have proper permission from proper authority

Opportunities

- Enough Vacant land for planned development
- High Demand from Tourist end

Action Required

- Widening Internal Road Network with Planned node
- Structure not permitted close to road (Building construction Act, BNBC)
- No structure without taking permission from proper authority
- Landmark sign & Direction of significant Hotel motel on the road

4.2.1.1 Key Proposal of Tourism Service Zone (TSZ) at a Glance

- Renovation and restructure of Rakhine Women's market
- Preservation of Buddhist temple and Kua (Water reservoir)
- Railway Station
- Road widening
- Renovation and enlargement of Water treatment Plant
- Secondary transfer stations & Public Toilet

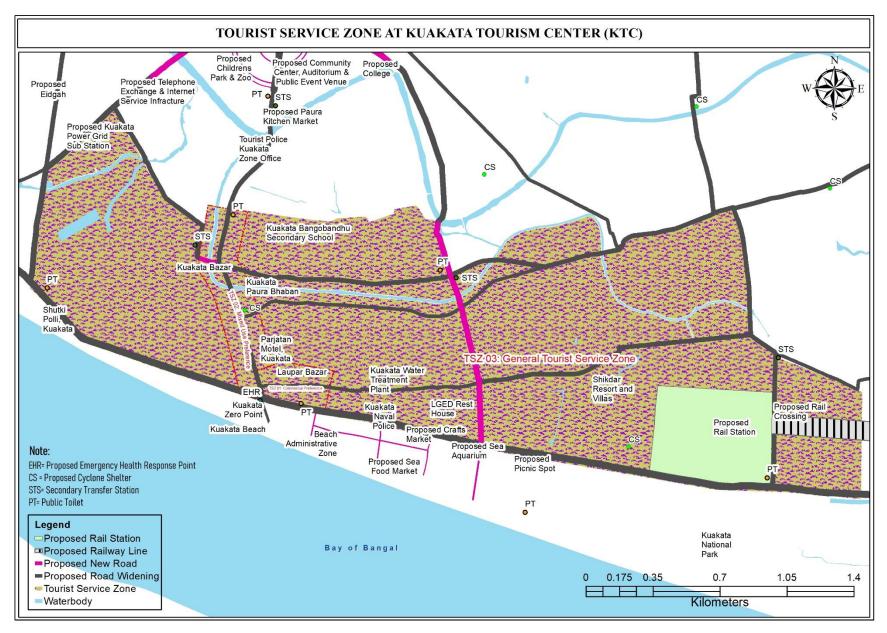
4.2.1.2 Planning Guidelines & Permitted Use

Table 4.1 Permitted Use for Tourist Service Zone

| Hotel, Motel, Resort, Villas & Tents | Tourist Agency Office |
|--------------------------------------|-------------------------------------|
| Restaurant | Emergency Response Service |
| Small Craft & Sea Food Market | Security Establishment |
| Sea Food Market | Residential Use of the local People |
| Watch Tower | Hospital/Clinic |
| Commercial Uses | Education & Administrative Services |
| Services & Community Facilities | Other Tourism Related Service |

Table 4.2 Restricted Use for Tourist Service Zone

| Industry & Manufacturing | Uses harmful for Health & Safety |
|--------------------------|----------------------------------|
| | |



Map 4.1: Tourist Service Zone

4.2.1.3 General Guidelines for Development Promotion & Control

| G-1 | Structure / Building must be constructed in compliance with the KTC Road Network Proposal. For individual building, setback must be calculated by considering the Proposed width of the adjacent road. | |
|-----|--|--|
| G-2 | Required green space & Open space have to be kept according to real estate development law while large area land development take place. | |
| G-3 | Natural waterbody & declared Protected pond in KTC master plan shall remain free regarding any kind of physical Development | |
| G-4 | No Permanent Structure in Ecologically Sensitive Area (ESA) | |
| G-5 | Height Zoning mentioned in Kuakata Tourism Center (KTC) Masterplan for Specific area is also applicable for Tourist Service Zone. | |

4.2.2 Exclusive Tourist Zone

The necessary elements for exclusive tourist zone are comparatively better privacy, calm environment, isolated location & better security. Considering all those compulsory issues the very Eastern part of Kuakata Tourism Center (KTC) locally known as 'Kawar Char' comprising of 722-acre land has been identified as Exclusive Tourist Zone. It is somewhat isolated from the urban center & crowdy beach area. The Exclusive Tourist Zone has been sub categorized into three segments in order to make proper Physical planning & development control; those are Exclusive Tourist Zone 01, 02 & 03.

Exclusive Tourist Zone

General Trend & Issues

- Away from urban Centers & crowdy beach area
- At the very corner area
- Connectivity Mainly Through Beribadh

Opportunities

- Cluster of Vacant land for planned development
- Clear Sea view & number of Canal

Action Required

- Widening the Beribadh with protection (120 feet)
- Make the beribadh top as pucca road
- Internal Road Network Proposal & widening
- Proposal of exclusive services & Uses for foreigners
- Security establishment proposal like police sub station
- Boat ghat & Sea plane landing point proposal

4.2.2.1 Ideas for Exclusive Tourist Zone

- Beachfront Accommodations: Luxury resorts, villas, or beach houses with direct access to the beach and stunning views of the coastline.
- Private Beach Access: Exclusive access to a secluded beach area with comfortable loungers, beach umbrellas, and attentive beach service.
- **Beachside Dining:** Elegant beachfront restaurants or dining areas where guests can enjoy gourmet cuisine while taking in panoramic ocean views.
- Water Sports and Activities: Facilities that offer a range of water sports and activities such as snorkeling, scuba diving, jet skiing, parasailing, or paddle boarding.
- **Beach Clubs:** Exclusive beach clubs or lounges with private cabanas, infinity pools, sunbeds, and beachside bars serving refreshing beverages and snacks.
- **Beach Yoga and Meditation:** Dedicated spaces for beachside yoga and meditation sessions, allowing guests to unwind and connect with the serene coastal environment.
- Beach Bonfire and BBQ Areas: Designated areas where guests can enjoy cozy bonfires, beachside BBQs, and evening entertainment in a picturesque setting.
- **Personalized Services:** Attentive staff providing personalized services such as beachside drink service, towel assistance, and arranging special beach experiences or romantic setups.
- Sunset Viewing Points: Elevated platforms or designated areas offering unobstructed views of breathtaking sunsets over the ocean, creating unforgettable moments for guests.
- **Beachside Bars and Lounges:** Stylish bars or lounges located directly on the beach, offering refreshing beverages, signature cocktails, and a laid-back atmosphere.
- **Private Beach Cabanas:** Exclusive beachfront cabanas with comfortable seating, shade, and personalized service, providing a secluded and intimate beach experience.
- Waterfront Dining Experiences: Unique dining experiences such as beachside candlelit dinners, private picnics on the sand, or floating platforms where guests can enjoy gourmet meals right by the water's edge.
- **Beach Butler Service:** Dedicated beach butlers who cater to guests' needs, offering beach setup assistance, towel service, and ensuring a seamless beach experience.
- Kids' Play Area and Activities: Facilities that cater to families, including supervised kids' clubs, playgrounds, and organized beach activities for children, ensuring a fun and engaging beach vacation for the whole family.
- Beachside Spa Treatments: Exclusive spa treatments performed right on the beach, allowing guests to indulge in massages, facials, or body therapies while enjoying the soothing sounds of the ocean.
- **Beach Volleyball and Sports Facilities:** Designated areas for beach volleyball, beach soccer, or other beach sports, providing opportunities for active recreation and friendly competitions.

- **Beachside Entertainment and Live Music:** Evening entertainment, live music performances, or beach parties featuring renowned artists or DJs, creating a vibrant and festive beach atmosphere.
- **Beachfront Shopping:** Boutiques or shops offering beachwear, souvenirs, local handicrafts, and other beach-related items, allowing guests to enjoy a unique shopping experience by the water.

4.2.2.2 Planning Guidelines & Permitted Use of Exclusive Tourist Zone

| Hotel/ Motel/ Cottage/Studio | Handicrafts/ Souvenir Shops | Outdoor/Indoor Games |
|-------------------------------------|---|---------------------------------------|
| Swimming Pool/Wash Room | Open Air Stage for Performing Arts/ Music | Casino/Bar |
| Fast Food Outlet/ Ice Cream Parlour | Model Handicraft Village | Monuments |
| Continental Food Court | Limousine Service | Aquarium |
| Indigenous Food Court | Convention Centre | Watch Tower |
| Health Club | Indoor Games/ Recreation | Recreational activity |
| Restaurants | Model Handicraft Village | Others associated uses for Tourism |

Table 4.3: Permitted Uses for Exclusive Tourist Zone

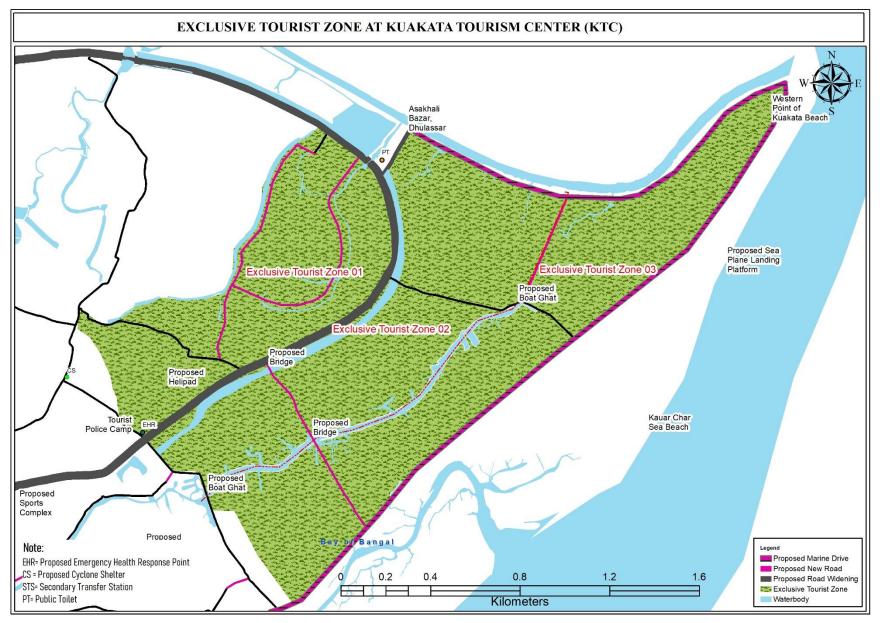
4.2.2.3 Development Regulation in Exclusive Tourist Zone

In Exclusive Tourist Zone the Development is regulated into some extent. In terms of physical development, the following regulation has been imposed for separate Sub Zones;

- 01. Exclusive Tourist Zone (ETZ- 01): There is no additional regulation on structure height except existing acts & rules like Building Construction act & BNBC etc.
- 02. In Exclusive Tourist Zone (ETZ 02): Building or Structure height must be limited to three (03) stories or equivalent.

03. In Exclusive Tourist Zone (ETZ 03): All kinds of Permanent structure are restricted; activities only

04. The general Guidelines for Tourist Service Zone is also applicable for Exclusive Tourist Zone



Map 4.2: Exclusive Tourist Zone

4.2.3 Eco Tourism & Tourism Village Zone

Kuakata Tourism Center (KTC) area is filled with eco-tourism elements like dense forest & nice canals. In fact, Eco-tourism is more potential here than that of normal tourism activities. In KTC Master Plan there is proposal of Eco tourism & Tourism Village Zone where ecotourism elements are nicely available.

This zone is designed to offer a harmonious blend of eco-resorts and luxury tents, creating an impressive experience for tourists to connect with nature. The primary focus is to allow visitors to experience nature's beauty & sense of tranquility and serenity. One of the notable advantages of this zone is its close proximity to the beach area. This allows tourists to easily access to the beach; enjoy breathtaking views and the opportunity to engage in beach-related activities such as swimming, sunbathing, or enjoying the ocean breeze.

These areas are nicely balanced with forest & meandering canals along with abundant wildlife. These natural features not only contribute to the aesthetics of the area but also create a rich and diverse ecosystem. The lush green landscape, teeming with native flora and fauna, adds to the natural beauty and appeal of the zone. Tourists can explore the reserve forests, take boat rides along the canals, and have opportunities to observe and appreciate the local wildlife in their natural habitat. The zone is divided into three parts to facilitate a well-organized and diverse development plan. Zone 01 spans an area of 167 acres, Zone 02 covers an area of 117 acres, and Zone 03 encompasses a vast 754 acres. Each zone can have its distinct features, amenities, and attractions, providing a range of options for tourists to choose based on their preferences and interests.

Eco Tourism & Tourism Village Zone

General Trend & Issues

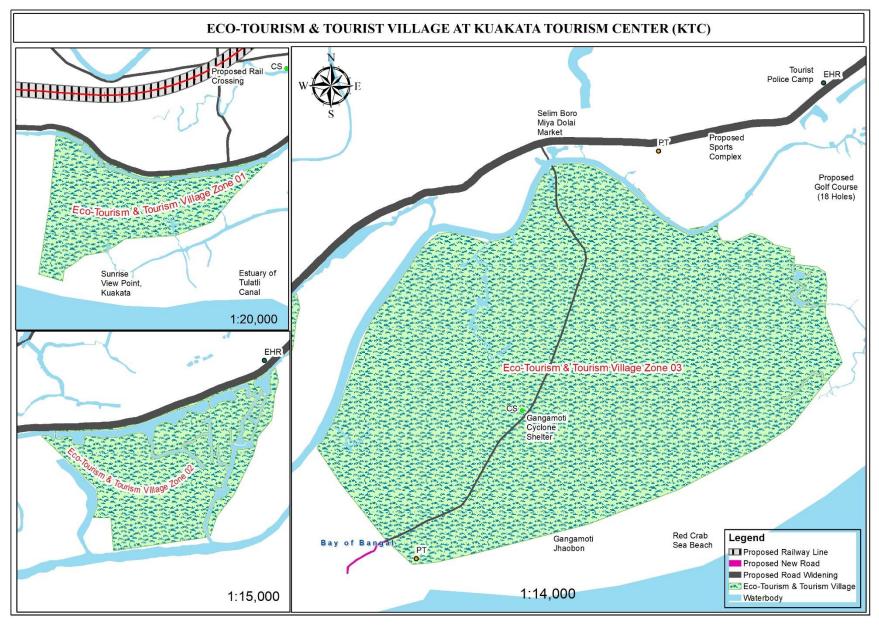
- Formal road network is absent
- Connected with Beribadh & proposed marine drive
- Connectivity mainly through Beribadh

Opportunities

- Enough Vacant land for planned development
- Reserve forest touches all three Eco Tourism Villages
- Tulatoli Canal goes through all three Tourism Village

Action Required

- Three 03 Wider road from Beribadh for three Tourism Village as major entry
- Internal Road Network Proposal
- Proposal of ecotourism services in compliance with Tourism Village
- Boat ghat & Sea plane landing point proposal



Map 4.3: Eco-Tourism & Tourism Village Zone

4.2.3.1 Planning Guidelines & Permitted Use of Eco-Tourism & Tourism Village Zone

| Cottage, Resort, Villas, Luxury/Budget Tent | Handicrafts/ Souvenir Shops |
|---|---|
| Swimming Pool/Wash Room | Open Air Stage for Performing Arts/ Music |
| Fast Food Outlet/ Ice Cream Parlour | Model Handicraft Village |
| Floting Hotel (Flotel) | Limousine Service |
| Indigenous Food Court | Jungle & Canal Safari |
| Health Club | Model Handicraft Village |
| Restaurants | Other Recreational activities |

Table- 4.4 Permitted Uses for Eco Tourism & Tourism Village Zone

4.2.3.2 Development Regulation

In Eco-Tourism & Tourism Village Zone the Development is regulated in terms of physical development by the following regulation;

- 01 Structure height must be limited to two (02) stories or equivalent.
- 02 Natural Waterbody & Reserve forest must be preserved (No physical Development)

4.2.4 Beach Activity Zone

The area between Beribadh & proposed marine drive containing 76-acre land approximately started from zero point & ended to Kuakata national park is deteriorating & getting encroached day by day. This is a very vigorous area for tourism issue as it is close to core urban area & main entry to the sea. Therefore, to protect this vital area of land this part has been identified as Beach activity zone with some specific proposal like Beach administration, Seafood Market, Sea aquarium & Picnic Spot. This area has been classified into three Category Open Space, Beach Administration Area & Other Beach activity Area.

BAZ 01: Open Space Area (9.6 acre)

It is the primary beach entrance with 10ac land mostly occupied by unauthorized shops & hotels. To capitalize its scenic beauty and ensure unobstructed beach entry for tourists the unauthorized commercial activity has to removed & make the space free for beach activity & for recreational purposes.

BAZ 02: Beach Administration Area (13 acre)

Beach Administrative Area, will act as a hub for administrative functions. The temporary office of beach protection committee is situated here. A modern Beach Administrative Area needs an information desk, a tourism police booth, small auditorium capable of hosting administrative seminars and events, office of the Beach Protection Committee & Beach volunteers along with security tower to monitor the tourist movement.

BAZ 03: Other Beach Activity Area (53 acre)

This 53-acre area is mainly for Sea Food Market, Craft market, Sea Aquarium & Picnic Spot etc.

Beach Activity Zone

General Trend & Issues

- Most busy area
- Adjacent to Tourist Service Zone
- Connected with Beribadh & Proposed marine drive
- Connectivity Mainly Through Beribadh

Opportunities

- Tourist density is high here
- Close to existing rakhaine market
- Clear Sea view & Element of Preservation (Temple)

Action Required

- Three Access road (20 ft) from Beribadh as an entry
- Internal Road Network Proposal
- Construction of Public toilet into suitable & useful location
- Removal of unauthorized structure from BAZ 01 area
- Proposal of Open space, Seafood market, Sea aquarium & Picnic spot at BAZ-03 area

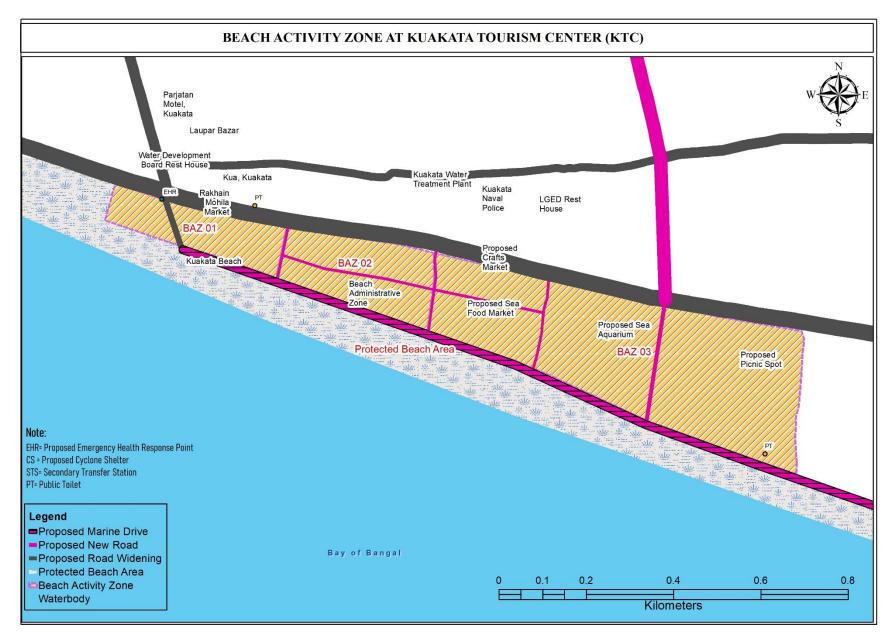
4.2.4.1 Planning Guidelines & Permitted Use of Beach Activity Zone

Table 4.5 Permitted Use for Beach Activity Zone

| Planned Sea Food Court/ restaurant/cafe | Administrative uses |
|--|--|
| Picnic spot & associated facilities | Security installment/police box |
| Kitchen/washroom/Sitting arrangement/Tent/restroom | Recreational uses |
| Watch Tower | Architectural Element |
| Sea aquarium & associated facilities | Other beach activity & Associated sports |

3.2.4.2 Development Regulation of BAZ

- 01 Structure height must be limited to Twenty (20) feet Except open space area
- 02 No Permanent structure at **BAZ 01:** Open Space area (Only Sitting arrangement & beach activity)
- 03 Elements/Structure of high archeological value needs to be preserved
- 04 Natural Waterbody & Canal must be preserved (No Physical Development)



Map 4.4: Beach Activity Zone

4.2.5 Govt. & Administrative Service Zone

This Zone is located at the western part of KTC area. It consists of 353-acre land. There are some ongoing projects from Various government Department like Bangladesh Army, Navy, Coastguard & Bangladesh Parjatan Corporation located here. If demand arises from other government departments it should be contained within this zone.

Govt. & Administrative Service Zone

General Trend & Issues

- Multiple on-going Government Projects
- Western Part of KTC area
- Connectivity Mainly Through Beribadh

Opportunities

- Cluster of Vacant land for planned development
- Clear Sea view
- Strong security with less effort & human resources

Action Required

- Widening the Beribadh with protection (120 feet)
- Make the beribadh top as pucca road
- Internal Road Network Proposal & widening

3.2.5.1 Key Proposal of the Zone

- Radar Station and observation tower with naval base
- Establishment of Bangladesh Army
- Secondary Transfer station

- Kuakata Power grid Sub station
- Kuakata Stadium
- Establishment of others govt. Department

3.2.5.2 Planning Guidelines & Permitted Uses of Govt. & Administrative Zone

Table 4.6 Permitted Use for Govt. & Administrative Zone

Office /Residence & Banglow of Government Body

Office /Residence & Banglow of Autonomous/ Semi-autonomous/Corporation & Authority

Office /Residence Banglow of State-owned Company /bank

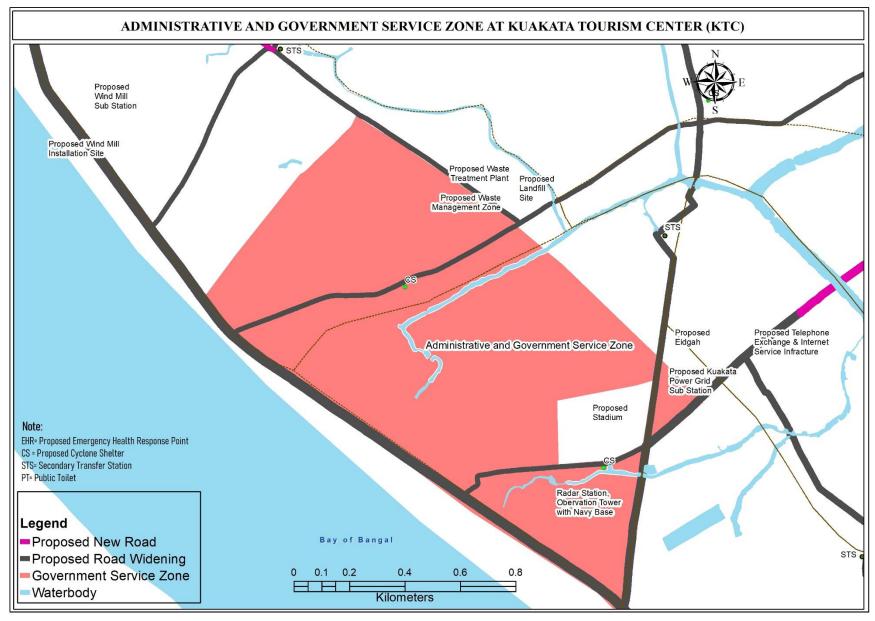
Government Service & Facilities/utilities

Commercial Uses by Government body/State owned Company/corporation etc

Supporting Private services with the consent of Proper authority

Associated uses by Government body/State owned Company/corporation/authority etc

*Note: Uses not mentioned here is restricted



Map 4.5: Administrative & Govt. Service Zone

4.2.6 Planned Development Zone

Kuakata Tourism Center lacks events to make tourist stay longer. Therefore, this KTC Plan suggests various ecotourism idea. But kuakata is not simply potential for ecotourism elements. Through proper physical development with the help of modern architecture there might have a chance to make a simple area into tourist attraction point. Planned development zone is such kind of zone where Some Development will be taken place through proper planning. It is located at the outer part of Kukata municipal area by following a circular pattern where Dhaka-kuakata highway at the center consisting of 144 acre land area. From here by the two side of Dhaka kuakata highway two major entry come out & go through to the Sea. This junction has been named as 'Bangabandhu Square'. Around this junction there are some proposal like Monument of the Bangabandhu, Cultural history museum, children parks & zoo, Amphitheatre, Food court & Crafts market etc.

| Pla | Planned Development Zone | | |
|-----|---|--|--|
| Ge | neral Trend & Issues | | |
| • | Located at the way to enter into KTC area | | |
| • | Dhaka-kuakata highway at the center | | |
| | | | |

Opportunities

- Low density area
- Close to existing bus stand
- Vacant land
- Existing 20 bed hospital

Key Proposal & Required Action

- Widening the Dhaka kuakata highway (120 feet here)
- Internal Road Network Proposal
- Proposal of fire station & Extension of Existing Hospital
- Proposal of Monument of the Bangabandhu, Cultural history museum, children parks & zoo, Amphitheatre, Payra-kuakata Development Authority office, Food court & Crafts market etc
- Proposal of additional two major road vertically connected to beribadh starts from the proposed Bangabandhu square that will act as two major entry to the beach or sea.

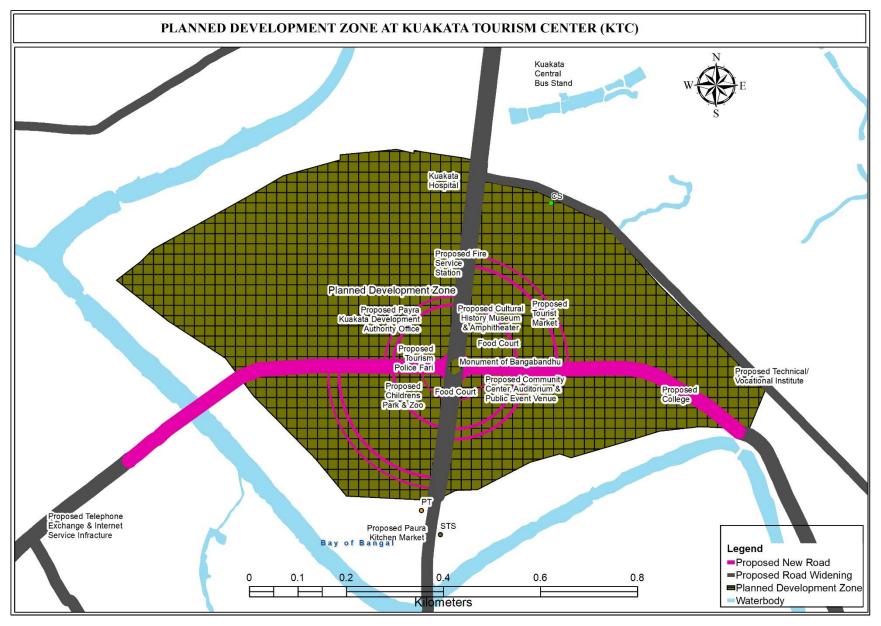
3.2.6.1 Planning Guidelines & Permitted Uses of Planned Development Zone

| Table 4 7 | Permitted | I Ise : | at Planned | Development Zor | ne |
|-----------|------------|---------|------------|-----------------|----|
| | i emiliceu | 0300 | | | |

| Food Court/ restaurant/café | Administrative uses/open spaces & greenbelt |
|---|--|
| Children Park, Zoo, Amphitheatre & museum | Security installment/police box |
| Crafts market | Architectural Element/monument |
| Educational Uses | Utility & Community Facilities / govt services |
| Residential / Commercial | Other infrastructure suitable for development |

Development Regulation

• General guideline for development promotion & control is applicable for this Zone



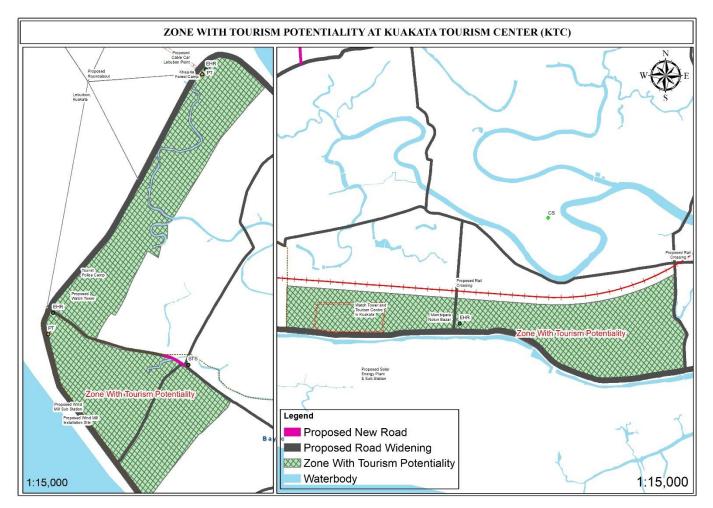
Map 4.6: Planned Development Zone

4.2.7 Area with Tourism Potentiality

The very western part of the KTC area close to lebur bon & the area opposite to Ecotorism & Tourism village Zone 01 have every opportunity & potentiality of becoming Tourist service zone but at present the demand of tourist accommodation can be fulfilled combinedly by proposed Tourist service Zone, Exclusive Tourist Zone & Eco tourism & Tourism village Zone. Currently these areas are mainly barren land or being used for limited use of rural residence, but the main potentiality remains for tourism development therefore preserved for future use. Tourism services will be allowed if demand arises.

4.2.7.1 Development Consideration & Regulation of the Zone

If authority feels there is a demand of promoting tourist services or demand arises from investor/ landowner point of view It can be considered. The authority can think either way by calculating the demand or need of installing tourism services here. The permitted uses will be same as Tourist service Zone & General guidelines will also be applicable for structure construction & uses of the structure. Again, height zoning is also applicable here.



Map 4.7: Zone with Tourism Potentiality

4.2.8 Manufacturing & Processing Zone

Kuakata area is largely potential with fish & agricultural production; more specifically the amount of fish produced in this area is significant. It is the place to collect various kinds of sea fish including our national fish Hilsha. Moreover, the land is very much fertile here; specific kinds of monsoon fruits like watermelon planted here in large amount. Due to climate condition & also geographical location every time this product couldn't be marketed in time. Therefore, an agro-fish processing zone is very much essential as this kind of product is severely perishable. However, in KTC master plan It is located close to core commercial zone of Alipur bazar. A fish landing center is established at Mahipur bazar but still is not in operation. The market condition of Mahipur & Alipur is not in good shape. The structure of market needs to be improved & again these tons of perishable fish needs to froze properly because you can't predict the market & climatic condition. In Bangladesh we are just selling the raw fish & even export the raw fish only. We could not explore the idea of processed fish yet. But this sector has the endless potentiality. It will also enhance the value of our fish product. If we can process the raw fish into canned or ready to cook product with proper quality assurance the whole world will be our market & things will surely become larger for us. In the same way our agro product in this area can also be processed into canned or bottled product with proper preservation. To support the issue in KTC master plan there is a proposal of Manufacturing & Processing Zone. The manufacturing & processing industry has been segmented into three parts; those are:

Zone -01: Fish Processing Area (89 acre)

Zone-02: Agro Processing Area (20 acre)

Zone-03: Light Industrial Area (60 acre)

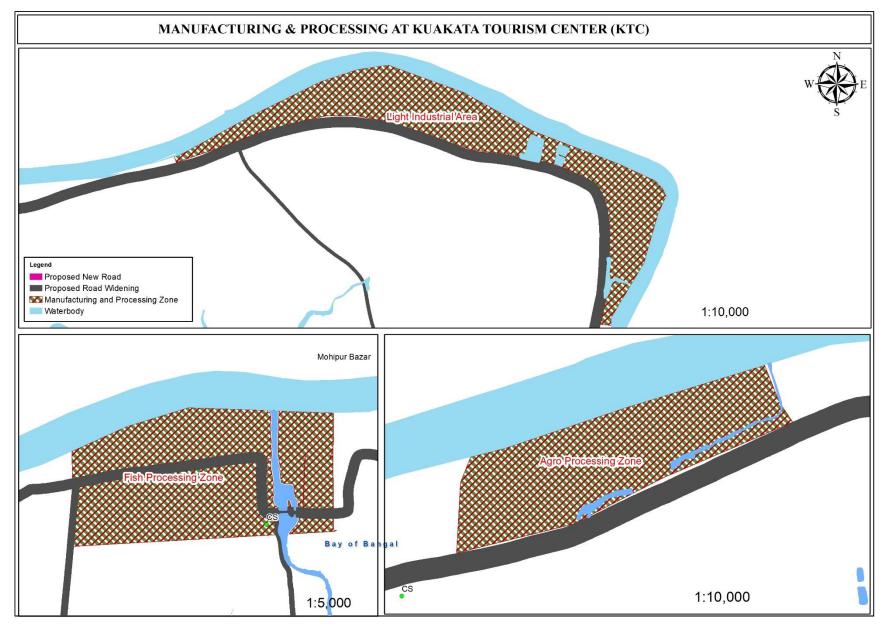
4.2.8.1 Planning Guidelines & Permitted Uses of Manufacturing & Processing Zone

Table-4.8 Permitted Use at Manufacturing & Processing Zone

| Fishing ghat/landing Point | Utility & Community Facilities / govt services |
|--|---|
| Storage Facilities, Warehouse | Truck loading Unloading point |
| Processing Plant (Agro/Fish) | Traetment plant |
| Commercial space (Selling & display point) | Forwad & Backword Industry (Ice, Packeging etc) |
| Residential use/mess/Dormitory | Other infrastructure suitable for Fish & ago processing |

4.2.8.1 Development Consideration & Regulation of Manufacturing & Processing Zone

- 1. No other toxic or heavy industry is permitted in **Zone- 01 & 02** except argi & fish processing industry along with limited backward or forward linked industry
- For Zone -03 light industry (Green Category & Orange A, B Industry) & Supporting industry of fish & Argo processing.
- 3. Installing ETP/Waste water Treatment plant is mandatory even for Fish/Agri processing Plant.



Map 4.8: Manufacturing & Processing Zone

4.2.9 Rehabilitation Zone

Development is not always a happy thing for everybody. There may have some people who can be homeless through the development process that is welcomed by others. Rehabilitation zone is for those helpless people who lost their nest through the development stream. If government need parcel of private land it goes through a proper land acquisition process; government used to compensate those landowners by giving lawful amount of money. But it's impossible to compensate the emotion of leaving their age-old residence. Again, in Bangladesh the destitute people used to live on government land; they need to be evacuated while starting a project there. With this development project they will become homeless although being into home is the prime right of the people. Therefore, state needs to rehabilitate those destitute people into a certain place. This is how rehabilitation zones comes into significance. Considering this kind of issues in KTC master plan 100-acre land close to Chaplibazar is fixed up as Rehabilitation zone. (Map: 4.13)

4.2.10 Open Space & Greenery Zone

Existing kuakata national park area with adjacent area containing 412-acre land approximately has been fixed up as park an open space Zone.

Parks & Open Space Zone

General Trend & Issues

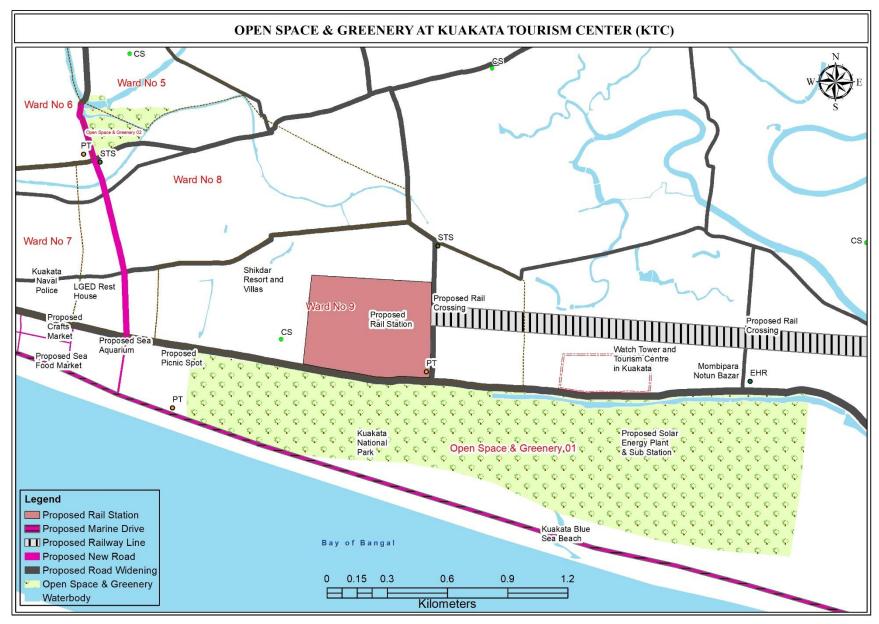
- Existing Kuakata national park
- Presence of forest & waterbody
- Connected with beribadh & proposed marine drive

Opportunities

- Large amount of plants
- Plenty of land to be used
- Large pond (Dighi) & Canal

Action Required

- Amusement park, Eco-park & wonderland
- Water based recreational activity based on existing Dighi
- Walkway/sitting arrangement surrounded by existing Dighi
- Boat ghat/ ghat & ornamental element installation into Dighi & canal
- Solar panel installation & sub station
- Segmented Plantation (single type for large area)



Map 4.9: Open Space & Greenery Zone

4.2.11 Planned Residential Zone

Kuakata is not quite identical like another small town. It is a small-town center at the corner of the state & a significant tourist spot for the country at the same time. Therefore, it hasn't gone through the very basic urban area zoning like Residential, Commercial & industrial etc. There is a common tendency of emphasizing Tourist & tourism activities here. As everybody tries to provide tourism related service & with this process the indigenous people or local people has been ignored into some extent. The core urban center has become the main tourist accommodation zone & in course of time the existing urban area gradually going in the same way. Therefore, the local residence is forced to shift their residence into comparatively fringe area or the location away from sea beach & mainstream Town center & that is how a Planned Residential Zone comes into part. 188-acre land between Planned development Zone & Tourist service zone has been declared as planned residential zone 01 & 140-acre land in kuakata bus stand area adjacent to Dhaka-kuakata highway has been declared as planned residential zone 02. (Map 4.13)

Planned Residential Zone

General Trend & Issues

- Major residential area for kuakata town (zone 01)
- High demand of large area residential development (Zone 02)

Opportunities

- Have connection with Dhaka-kuakata highway
- Adjacent to Proposed kitchen market
- Amount of land

Action Required

- Widening the Dhaka kuakata highway (120 feet here)
- Internal Road Network Proposal

3.2.11.1 Planning Guidelines & Permitted Uses of Planned Residential Zone

Table 4.9 Permitted Uses of Planned Residential Zone

| Residential House/ Quarters | Orphanage | Hostel/Mess | Recreational/openspace |
|-----------------------------|------------|--------------|---|
| Service Appartment | Rest House | Grocery shop | Other Activity related to residential purpose |

4.2.12 Urban Deferred

The Urban Deferred refers to lands lying outside of the urban growth boundary and identified as Urban Reserve. As per the planning standard, about 10% areas out of total build up and new urban areas should be preserved for future urban use. Therefore about 130-acre land has been declared as urban deferred or urban reserve in KTC master Plan. It is located at the municipal fringe area. At present the major use is rural settlement & agriculture (Map:4.13)

4.2.13 Mixed Use Zone

There is such place which you cannot limit into single use. This kind of place could be by the side of a significant road or adjacent to significant uses or significant land marks. It refers to an area that incorporates two or more different types of land uses within a single development or neighborhood. Mainly this kind of place starts its journey through residential uses; gradually commercial & then others associated uses. It is designed to promote a combination of residential, commercial, institutional, and/or recreational activities in close proximity to each other. The concept of mixed land use aims to create vibrant and diverse communities by integrating different land uses, allowing for greater convenience, reduced travel distances, and enhanced social interaction. Mixed use zones are essential to promote balanced growth.

In Kuakata Tourism Center (KTC) masterplan a buffer area by the two side of Dhaka-kuakata highway started from Alipur bridge & ended to municipal boundary with approximate 167 acre land has been declared as Mixed-use zone 01 & another 85 acre land adjacent to fish processing area associated by a significant road (80 feet proposal) vertically connects with kuakata beribadh into two parts is fixed up as Mixed-use zone -02 (Map 4.10).

4.2.13.1 Planning Guidelines & Permitted Uses of Mixed-Use Zone

Table 4.10: Permitted Uses of Mixed-use Zone

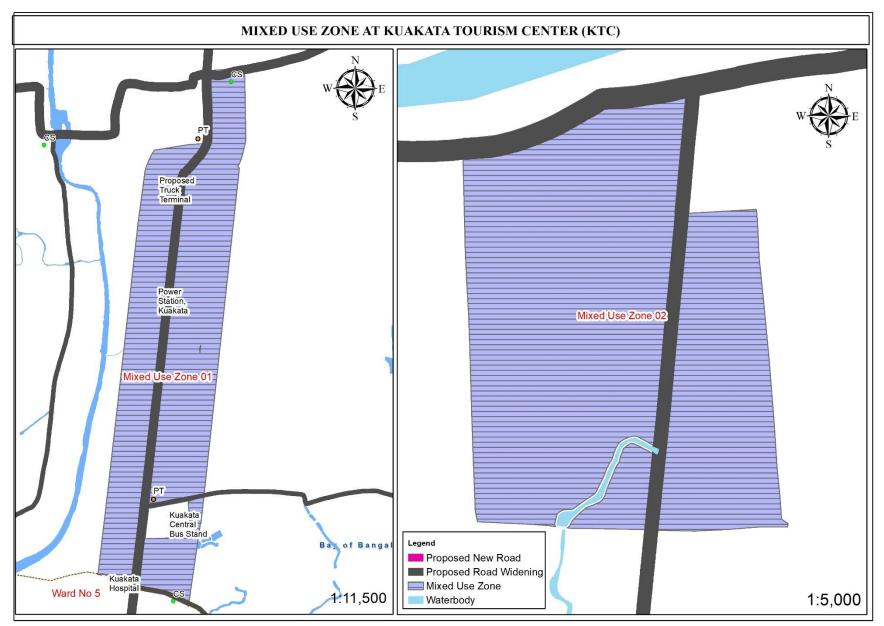
| Residential | Commercial | |
|-------------------------------------|---------------------------------------|--|
| Administrative & Government Service | Recreational | |
| Community Facilities | Tourist Accommodation & other service | |

Development Regulation

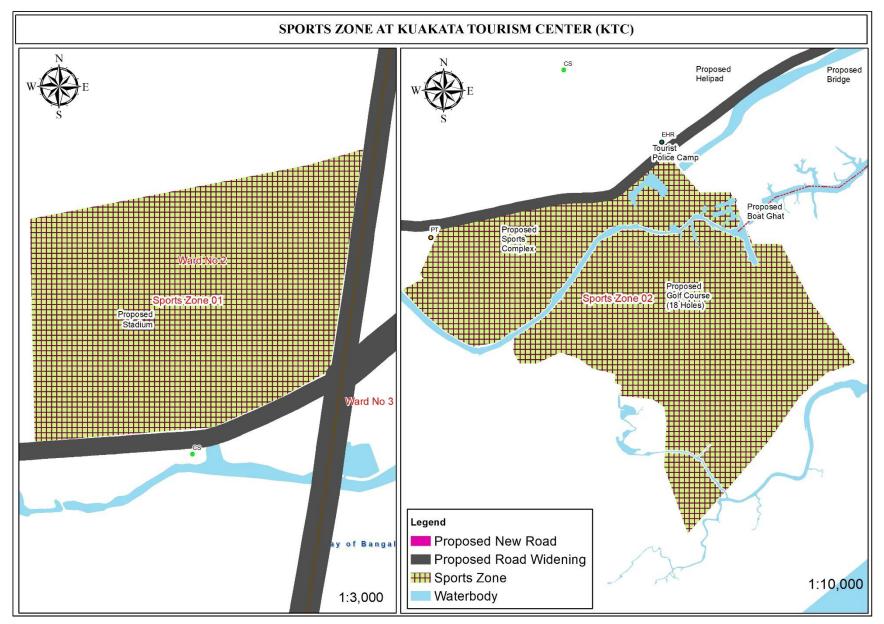
- No Industrial use in Mixed use zone 01
- Limited industry (Green Category) is permitted in Mixed use zone 02

4.2.14 Sports Zone

Kuakata area doesn't have international or national level stadium, sports complex & golf course. As a tourist spot these elements are mandatory. Therefore, in KTC masterplan Sports Zone has been fixed up into two different parts of KTC area. Approximately 19 acres land for sports zone 01 to establish a cricket stadium located at western part adjacent to Tourist service & Government Zone. Again, for a golf course & Indoor sports Complex approximately 213-acre land adjacent to exclusive tourist zone has been fixed up as sports zone 02. The permitted use will be sports related activities & structure along with needed services/facilities & utilities (Map 4.11).



Map 4.10: Mixed-use Zone



Map 4.11: Sports Zone

4.2.15 Area with Ethnic Characteristics

This Zone stands for ethnic community of the region demarketing their neighborhood, culture and heritage. This zone comprises 85 acres of land adjacent to Misripara Buddhist temple & heritage site. Rakhaine people, the age-old residence of kuakata has been residing here for years. They do have a traditional life style & unique pattern of living structure. They mainly earn their livelihood by producing handicrafts & selling it to the tourist. Tourist from other parts of Bangladesh has attraction of their lifestyle, their food, their indigenous product etc. This community culture could be interesting idea for marketing as a community tourism (Map 4.13)

Area with Ethnic Characteristics

General Trend & Issues

- Living Area of Age-old residence (Rakhaine)
- Mostly rural residence
- Existence of Buddhist temple
- Indigenous way of living pattern & residence

Opportunities

- The large temple in this region
- Comparatively large Crafts market
- Amount of land

Key Proposal & Required Action

- Widening the Connecting road (60 feet)
- Preservation Of heritage structure & Site
- Maintain unique & indigenous pattern while constructing any structure

4.2.15.1 Development Regulation & Permitted Use

Table 4.11 Permitted use of Area of Ethnic Characteristics

| Residential | Commercial |
|-------------------------------------|-------------------------|
| Administrative & Government Service | Recreational |
| Community Facilities | Tourist related service |

Development Regulation

- 1. Heritage building /site must be preserved accordingly
- 2. Residential or any structure should maintain the unique pattern in compliance with ethnic culture

4.2.16 River side activity zone:

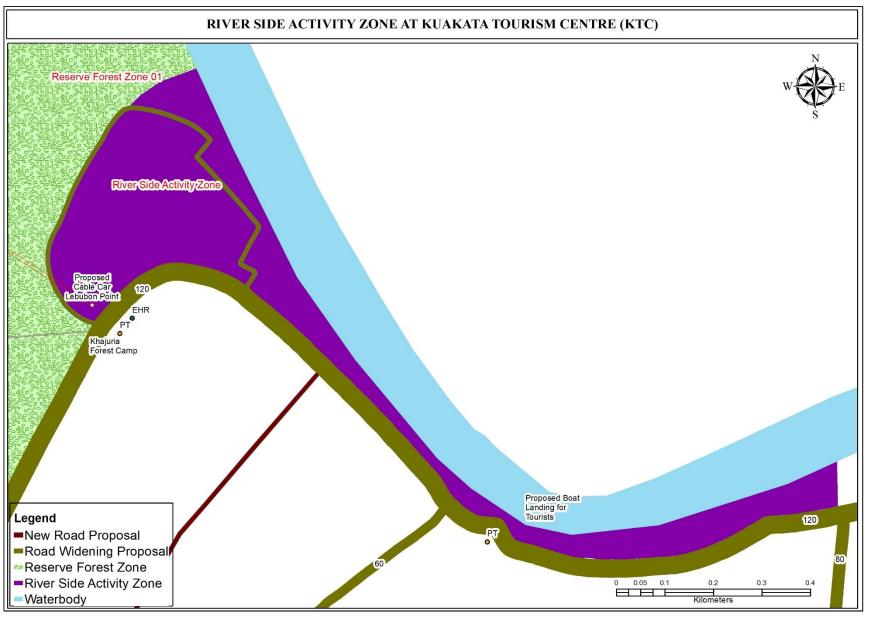
River side activity zone will serve as additional recreational and tourism spot in the region. A total 53 acre land adjacent to '*tin nodir mohona*' has been allocated for the purpose of riverside activities. Features may include

4.2.16.1 Key Ideas & Proposals at River side activity zone

- River Cruises: Enjoy a leisurely boat ride along the river, taking in the picturesque scenery, historical landmarks, and wildlife. River cruises often include narrations or guided tours to enhance the experience.
- Water Sports: Engage in water-based activities such as kayaking, canoeing, paddleboarding, or rafting. Rivers with suitable currents and rapids offer thrilling whitewater rafting adventures.
- **Fishing:** Rivers are often abundant with fish, providing opportunities for recreational fishing. Anglers can cast their lines and try their luck at catching various freshwater species.
- Picnicking and Barbecues: Riverside areas are ideal for picnics and barbecues. Set up a picnic spot, relax on the riverbank, and enjoy a meal with family and friends while appreciating the tranquil surroundings.
- Hiking and Walking Trails: Many riverside areas have well-maintained trails that allow visitors to explore the natural beauty and wildlife along the river. These trails can range from easy strolls to more challenging hikes.
- **Cycling:** Riverside paths often offer scenic routes for cycling enthusiasts. Rent a bicycle or bring your own and enjoy a ride while soaking in the riverside views.
- **Wildlife Viewing:** Rivers attract a diverse range of wildlife, including birds, mammals, and aquatic creatures. Visitors can observe and photograph the local fauna in their natural habitats.
- **Riverfront Dining:** Restaurants and cafes situated along the riverbanks provide a unique dining experience with stunning waterfront views. Enjoy a meal while watching the river flow by.
- Riverfront Festivals and Events: Many cities and towns organize festivals, concerts, or events along the riverfront. These gatherings often feature live music, food stalls, art exhibitions, and cultural celebrations.
- Riverfront Parks and Gardens: Riverside areas often have parks and gardens that offer green spaces for relaxation and recreation. Visitors can enjoy walking paths, open lawns, and landscaped gardens along the river.

4.2.16.2 Development Regulation

- 1. Structure for recreational purpose is permitted only
- 2. Structure height needs to be limited to 20 feet



Map 4.12: Riverside Activity Zone

4.2.17 Rural Settlement

In Kuakata Tourism Center (KTC) area around 4186-acre land has been using as rural settlements. The characteristics & Pattern of uses of this particular land is different from others parts of KTC area. The permitted landuse could be as follows;

| Rural residence | Rural Commerce |
|-------------------------------------|----------------|
| Administrative & Government Service | Recreational |
| Community Facilities | Educational |

4.2.18 Agriculture

In entire KTC about 4986-acre land is being used for agriculture & crop production. This parcel of land is very vital as far as food security is concern. These valuable land needs to be protected through proper guideline & development control mechanism. The Permitted land use could be;

| Dairy Farm | Horticulture | Pasture/Grazing Land |
|--------------------|--------------|-------------------------|
| Farm Land | Nursery | Poultry Farm |
| Farm Office | Orchards | Crop Production |
| Fisheries | Irrigation | Research (Agricultural) |
| Flower Cultivation | Other Farm | Other Agricultural Use |

Control guidelines

- 1. Agricultural land must be protected; no physical development at triple crop land
- 2. Uses doesn't associated with agriculture/food production is not permitted

4.2.19 Reserve Forest

The forest area is reducing in KTC than that of earlier. At present 1665-acre land is being used as forest land. This forest includes natural & planted forest. This forest has been located into two different part like;

Reserve Forest 01: At the very western part of kukata locally named as 'lebur bon' consists with 557-acre land

Reserve Forest 02: Located at Sunrise view point locally named as 'Gangamotir Forest' consisting 1108acre land

| Ecopark/Safaripark | Picnic Spot |
|--------------------|--------------|
| Jungle Safari | Canal safari |
| Wooden trail | Watch Tower |

Control guidelines

3. Forest area must be protected; no other physical development except the permitted one

4.2.20 Ecological Sensitive Zone

Kuakata Tourism Center area is crisscrossed by lots of canal & ecologically sensitive elements like forest, river & Sea. People used to give importance the Sea & then the major river. People used to consider the sea & major river to be preserved but they ignore the canal entirely. Therefore, these canals have gradually become encroached & expired at the end. We accustomed to forget the thing that these canal Plays a vital role as natural drainage system & irrigation purpose. If we encroach the canal it will arise water logging, less yield of Argo product, Environmental degradation etc. At present kuakata is facing this kind of problem due to this canal encroachment. Again, these canals could be a very good alternative as a interesting transportation network & recreational elements. Therefore, in KTC master plan the major canal along with a buffer area by the two side has been declared as Ecologically sensitive Zone.

Guidelines of Ecologically Sensitive Zone

- 1. No garbage (solid/liquid) is to be disposed into the Ecological Sensitive Zone (ESA)
- 2. All Canals need to be rehabilitated through eviction & excavation
- 3. Canals could be excavated by following mouza map if possible, otherwise natural direction as the plan required.
- 4. Provide Pedestrian walkway on both sides of canal where cycling is allowed
- 5. Preserve natural forest on both side of canal & take afforestation scheme where natural forest is absent
- 6. Put in bridge with proper design instead of culvert where necessary by considering the tide & the height of water transport.
- 7. Relocation of People who are affected by eviction & excavation programme with justified compensation
- 8. Development activity in Ecologically Sensitive Zone must comply to the points 4 & 5 & Forest & Water body Conservation act, 2000.

4.2.21 Protected Beach Area

Beach area has been declared as protected area in the plan. No permanent structure is allowed on protected beach area. Protected Beach Area covers 900 acres land.

4.2.21.1 Development Regulation & Permitted Use

1. No Permanent Structure only activity is allowed in protected beach area



4.3 Height Restriction in KTC Area

Making high-rise structure close to sea & horizonal Development along the sea is a very common practice in Bangladesh. This obstacles along the sea side deprived most of tourist who stay a bit far from sea beach. It's not possible accommodate everybody close to sea. As Seaview is the prime attraction in Sea based tourist spot. It needs to take some regulation to make the sea view open for everybody & everybody should have equal opportunity to enjoy this sacred sign.

4.3.1 Sea Shoreline Fixation

A shoreline can be defined as the region where the water bodies such as lakes, seas, and oceans meet the land. It can also be considered the boundary between the land surface and water bodies. The water level could vary based on season, tide & climatic condition. During rainy season sea water goes much upper to the surface.

The general practice of fixing the shoreline is the line where sea water reaches during high tide in rainy season. In terms of kuakata sea beach the beribadh will be considered as sea shoreline where it touches the sea water. Rest of the Places proposed marine drive line will be considered as sea shoreline.

4.3.2 Height Restriction into Different Zone

4.3.2.1 General restrictions

G 1. This height restriction will be an added control with existing law like Building Construction Act, Rules & BNBC. Height restriction is equally mandatory to abide by in terms of constructing a structure.

G 2. No Permanent Structure within 100 meters from Sea shoreline if there is no specific height restriction imposes for specific zone.

G 3. Structure height will gradually increase by 100-meter interval; within 100-200 meter it will be limited to (03) stories; 200-300 meter it will be limited to (04) stories; 300-500 meter it will be seven (07) stories & After 500-meter height no additional height restriction except existing laws, rules & codes.

4.3.2.2 Special Restrictions

Special height restriction is applicable for Beach Activity zone **(BAZ)**, Open Space & Greenery Zone, Eco-Tourism & Tourism Village & Exclusive Tourist Zone **(ETZ)**

G 4. No Permanent structure at BAZ 01: Open Space Area (Only Sitting arrangement & beach activity)
G 5. Structure height must be limited to Twenty (20) feet in others Beach Activity Zone (BAZ 02 & 03) & Open Space & Greenery Zone

G 6. No Permanent structure within 300 meter from the sea shoreline in Eco-Tourism & Tourism Village Zone & Exclusive Tourist Zone

G 7. After the 300-meter line the structure height will be limited to two (02) stories or equivalent in Ecotourism & Tourism Village Zone.

G 8. In Exclusive Tourist Zone-02 (ETZ 02) Building height will be limited to Three (03) stories

G 9. No additional height restriction imposed except the existing laws, rules & codes in Exclusive Tourist Zone-03 (ETZ 03)

CHAPTER FIVE: TRAFFIC & TRANSPORTATION

5.1 Hierarchy of Roads

5.1.1 General Hierarchy of Road at KTC

In KTC Area there is only a regional road that is Barisal-Kuakata highway. The regional road itself connects Kuakata to upazila Kalapar & zila Patuakhali. Therefore, no other zila road is available in KTC. After that Union Road & Village road completes the mobility here. The Common Road category in Bangladesh is as follows;

Table 4.1: Common Road Category of Bangladesh

| National highways | Zilla roads | Union roads |
|---------------------------------------|-----------------------------------|-----------------------------------|
| Regional highways | Upazila roads | Village roads |

5.1.2 Functional Hierarchy of KTC Road Network

In KTC the road importance is based on not only regional connectivity or upazila connectivity but also the functionality as well. The main function is to enter into the sea & enjoy the sacred sign. Therefore, the road connects the main function will surely be treated as main road or primary road. There are other local attraction Point where tourist used to go. As this road is categorically union road or even village road but the amount of movement is pretty high, so the importance of widening or improving the road surface is also higher due to the function it plays. According to the function & proposed road width KTC road network is segmented into the following functional hierarchy;

• Primary Road

The primary road at KTC area usually connects the sea & create mobility among the important local attraction point. It works as the main artery at this area. Generally, the carriage way proposal of the primary road for KTC area lies into 80 -120 feet. The Barisal -Kuakata highway is the key primary road here. KTC master plan proposes Dhaka kuakata highway for promoting 120 feet instead of its present width 24 feet. Besides this Two new road proposal from proposed Bangabandhu square to Beribadh & Misripara road needs to be improved as primary road.

Secondary roads

Secondary roads are connected to one or more primary roads with proposed width range of 60-80 feet. These roads are narrower compared to primary roads and serve as connectors between major routes. These roads generally have fewer lanes and are intended to accommodate less volumes of traffic compared to primary roads. Jelepara Road, Mistripara Road to Beribadh connecting Road, Taherpur Road, Rakhaine Mahila Market Road, etc. are some of the major Secondary roads.

o Tertiary roads

Tertiary roads are connected to one or more Secondary roads with proposed width range of 30-60 feet. These narrower roads primarily serve local connectivity within specific area and are intended to accommodate less volumes of traffic compared to Secondary roads.

• Local Access Roads

These roads are typically found within community level or areas with low population density. They are intended for local traffic and primarily provide access to individual properties or local amenities.

5.2 Transportation Proposal (Major Road) for KTC area

| Road ID | Road Name | Existing Width(ft) | Proposed Width(ft) | Approx. Length(km) |
|---------|---|-----------------------|-----------------------|-----------------------|
| 1 | Dhaka Kuakata Highway Section I (Mahipur to proposed Bangabandhu Square) | 24 | 120 | 3.07 |
| 2 | Dhaka Kuakata Highway Section II (Proposed Bangabandhu Square to Beribandh Beach Point) | 24 | 80 | 1.73 |
| 3 | Bangabandhu Chattar Bypass Road Section II (proposed Bangabandhu Chattar to Beribadh adjacent to Ansar and VDP offices) | 18 | 100 | 2.08 |
| | Bangabandhu Chattar Bypass Road Section I (Proposed Bangabandhu Chattar to Beribandh adjacent to Shutki Palli) | 18 | 100 | 2.71 |
| 4 | East Beribandh Road (Kuakata Zero Point to Alipur Bazar via Mumbipara, Dholai Bridge, Chapali Bazar and Laxir Hat) | 24 | 120 | 27.99 |
| | West Beribandh Road (Kuakata Zero Point to Alipur Bridge via Lebourbon and Khajuria Forest Camps) | 22 | 120 | 10.10 |
| 5 | Proposed Marine Drive | | 60 | 17.64 |
| | Marine Drive & East Beribadh connecting road near Ashsakhali bazar | 10 | 60 | 0.26 |
| 6 | Nauripara Buddhist Temple Via Fasipara, West Beribadh | 16 | 80 | 3.08 |
| 7 | Kuakata Khanabad Degree College Via Azimpur, East Beribadh (Part 01) | 12 | 80 | 3.71 |
| 8 | Kuakata Khanabad Degree College Via Azimpur, East Beribadh (Part 02) | 18 | 80 | 1.37 |
| | Musullubad Alim Madrasa Via Notunpara, Chapli Bazar, Beribadh | 18 | 80 | 0.17 |
| 9 | Misripara Road (via Kuakata Bazar to Agrani Park, Kuakata Club, Musulliabad Primary School, Azimpur, and Misripara Rakhine Market to Friendship Health Care Center adjacent to East Beriband) | 16 | 80 | 8.03 |
| 10 | Tulatuli Jame Mosjid to Kuakata Club | 18 | 60 | 2.34 |
| 11 | Rakhaine Mahila Market Road (Water board building to Rakhaine Mahila Market) | 18 | 60 | 1.05 |
| | Rakhaine Mahila Market Via Sikder resort, Musullubad | 18 | 60 | 0.10 |
| 12 | Musullubad Alim Madrasa Via Notunpara, Chapli Bazar, to Beribadh | 18 | 60 | 0.02 |

Table 4.1 Transportation Proposal (Major Road) for KTC area

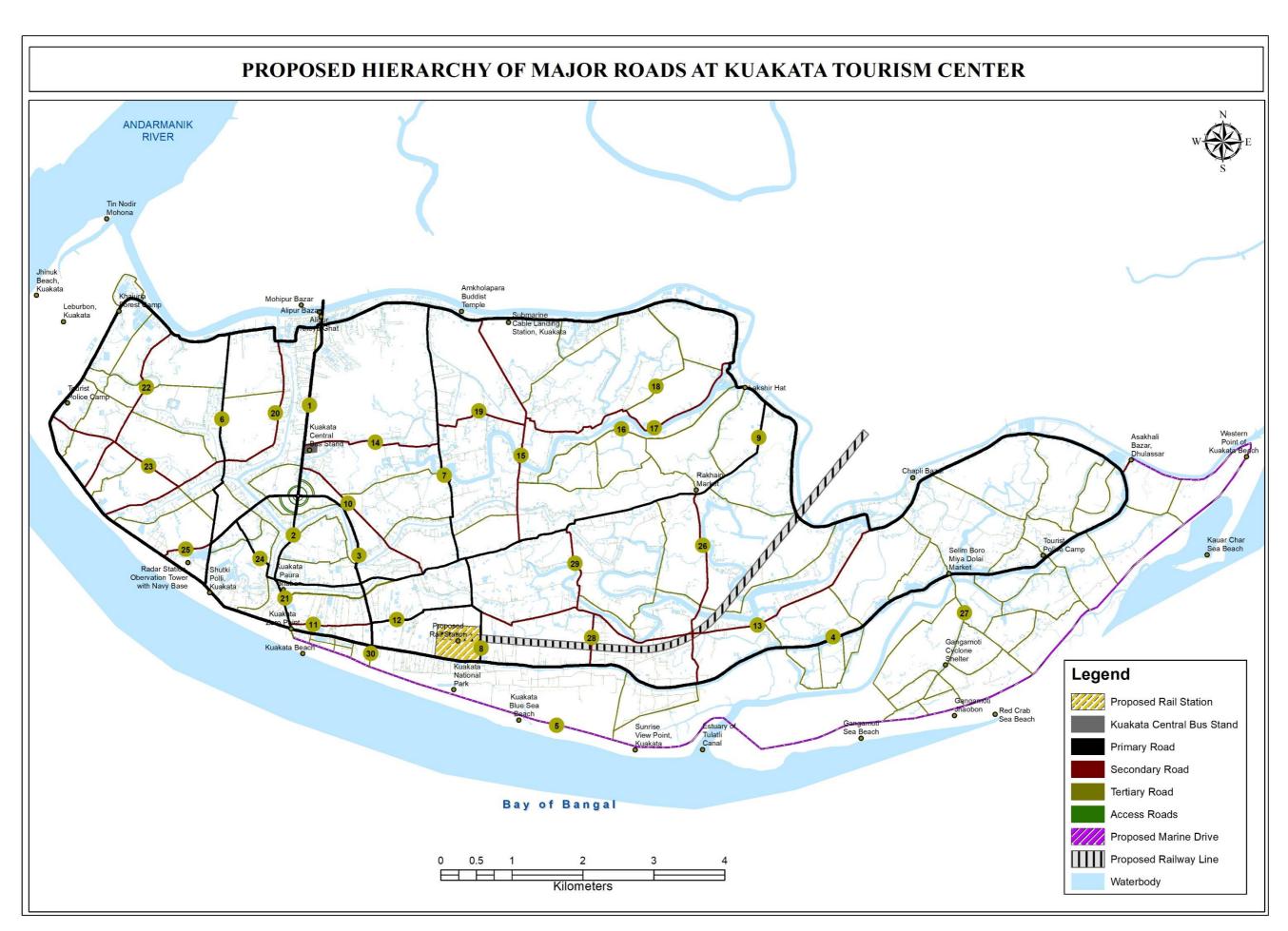
| | Rakhaine Mahila Market Via Sikder resort, Musullubad | 18 | 60 | 0.77 |
|----|--|----|----|------|
| 13 | Musullubad Alim Madrasa Via Notunpara, Chapli Bazar, Beribadh | 10 | 60 | 6.36 |
| 14 | Dhaka Kuakata Highway to West Deyar Amkhola Jame Mosque | 7 | 60 | 2.01 |
| 15 | Taherpur Road (East beribadh North Side Via Lokkhir Khal, Azimpur) | 9 | 60 | 3.34 |
| 16 | Taherpur Road to Lakshir Hat | 14 | 40 | 3.78 |
| 17 | Lakshipara Islampur Government Primary School to Kakshir Hat | 16 | 60 | 2.04 |
| | Tahirpur Govt Primary School to Lakshipara Islampur Government Primary School | 16 | 60 | 1.72 |
| 18 | Lakshipara Islampur Government Primary School to Mativanga Al-Mamun Govt. Primary School | 6 | 40 | 2.11 |
| 19 | Dhaka Kuakata Highwat to West Deyar Amkhola Jame Mosque | 12 | 60 | 1.42 |
| 20 | Farcepara Govt. Primary School to Beribadh via Sharifpur GPS | 18 | 60 | 1.88 |
| | Hatemur School Road (Hatempur Govt Primary School to Fasipara Cowrasta) | 18 | 60 | 2.24 |
| 21 | Hotel Rain Drops Road (From LGED Guest House adjacent Dhaka Kuakata Highway to Mistry Para Road) | 16 | 60 | 1.69 |
| 22 | Jelepara Road (West Beribadh North Side to West Beribadh South side) | 18 | 60 | 2.67 |
| 23 | Abdur Rahman Khan Jame Mosque to Beribadh Road via Beach Palace Hotel & Resort | 17 | 60 | 2.07 |
| 24 | Dhaka Kuakata Highway to Farcepara connecting Road | 18 | 80 | 1.09 |
| 25 | Shishu Kollan Primary School Road | 8 | 60 | 0.72 |
| 26 | Rakhain Market to East Beribadh connecting Road | 10 | 60 | 2.80 |
| 27 | Selim Boro Miya Dolai Market to Gangamoti sea beach via Char Gangamoti GPS | 8 | 30 | 2.62 |
| 28 | Mistripara Road to Beribadh connecting Road via Mombipara Notun Bazar (Part 01) | 10 | 60 | 0.72 |
| 29 | Mistripara Road to Beribadh connecting Road via Mombipara Notun Bazar (Part 02) | 10 | 60 | 1.24 |
| 30 | Beribadh to Beach connecting Road | - | 30 | 0.29 |

5.3 Railway Proposal

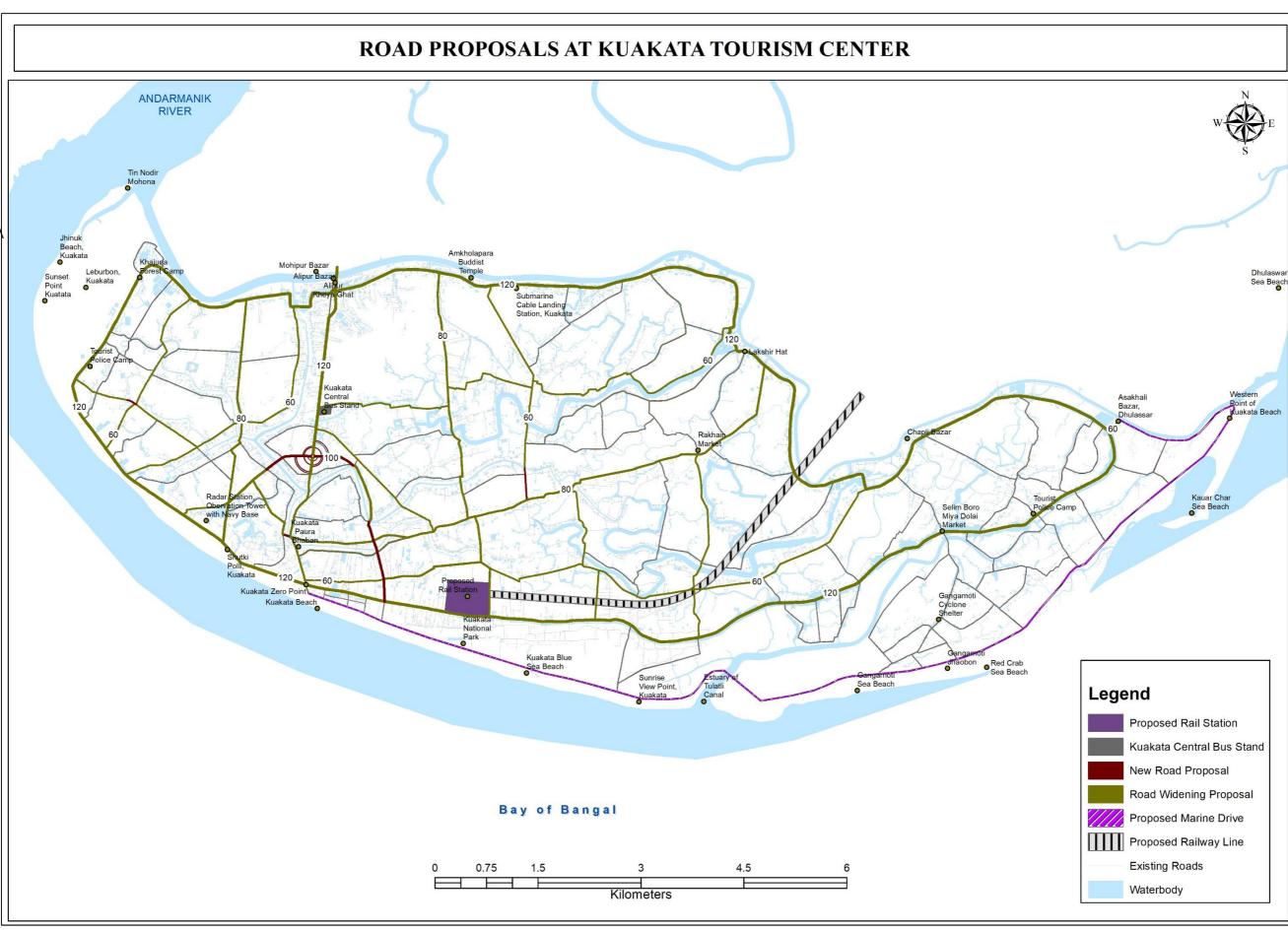
After the initial study & survey work Bangladesh Railway has given a proposal of installing a rail way line to connect Payra port & Kuakata together. It will help Kuakata Tourism Center captivating more tourist from remote parts of the country as Railway Journey is much comfortable. In this KTC master plan the rail line setting & railway station proposal is absolutly in prority list.

5.4 Airport Proposal

As Payra port is in operation now so airport emphasizing cargo carrying is very much important now. Again, there is a demand of passenger's travel regarding tourism. By considering both the fact KTC master plan proposes an airport closer to Payra port that also serve KTC & adjacent area as well.



Map 5.1: Proposed Road Hierarchy at KTC



Map 5.2: Road Network Proposal at KTC

5.5 Traffic Management

'Bus parking on the road' is the common scenario at kuakata during peak season. At that particular period Barisal -Kuakata highway has become temporary bus stoppage with almost 2km away from zero point. Earlier there was no bus stand at kuakata but at present there is a central bus stand with adequate capacity. Therefore, time has come to establish a traffic management system to tackle the traffic mismanagement. The following guidelines needs to be imposed regarding traffic management;

G-1. No passengers bus is allowed to go into the municipal area (after central bus stand). small motorized vehicle (Car/microbus/minibus) can be used to carry tourist from bus stand to particular hotel/Motel/Cottage.
G-2. 2 km distance from main beach point along Kuakata-Barisal highway (Zero point to proposed Bangabandhu square) needs to be considered as Pedestrian precinct. Non-motorized/indigenous & electric vehicle is allowed here in specific lane.

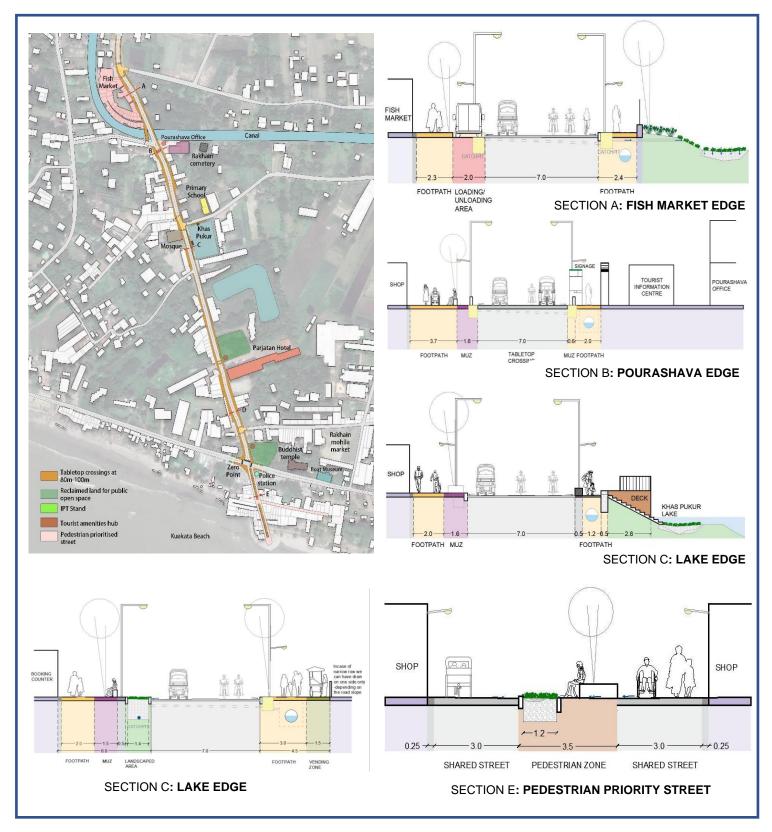
G 3. Individual Car/Microbus/Minibus can be used in specific lane through pedestrian zone to commute tourist from bus stand to hotel/motel/cottage. No parking on the road or outside declared parking zone.

5.5 Short-time Open space/Road Design (Fish market to Beach Point)

Barisal kuakata highway is segmented into two different parts with two different width proposal. The first one is to 120 feet width ended to proposed Bangabandhu square & another one is 80 width that starts from proposed Bangabandhu square to main beach point as the part is much crowdy regarding structure footprint. These 2 km road with 80 feet width proposal has been declared pedestrian precinct with specific lane for small vehicular movement to carry tourist from bus stand to particular hotel/motel.

At present approximately 1 km distance starting from zero point to existing fish market along the main highway is severely crowdy in terms of structural foot print along with vehicular & pedestrian movement. This 1 km needs short-term solution so that it could be implemented soon. As a short-term solution this 01-kilometer road will serve basically as open space along with limited vehicular movement for permitted vehicle in specifically designed lane. But later this road needs to be widened according to the KTC masterplan guideline.

Asian Development Bank (ADB) has a plan to develop inclusive public open space for coastal town in Bangladesh. Therefore, at kuakata ADB took the chance to make this one-kilometer raod as public open space that's what Urban Development Directorate (UDD) also identified as the short-term solution for this particular area in KTC masterplan.



Source: ADB, 2023

Fig 5.3: Public Open space designed by ADB

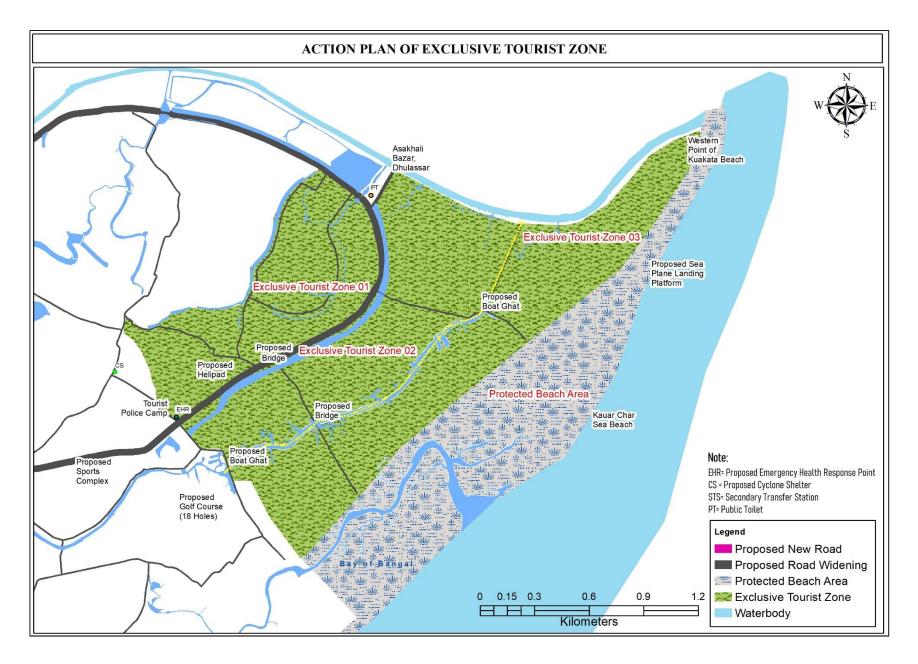
CHAPTER SIX: ACTION PLAN & WARD ACTION PLAN

6.1 Action Plan for Exclusive Tourist Zone

By considering the needs of foreign tourists and the local elite class, taking a liberal approach to facility selection, and focusing on creating a secluded and secure environment, the exclusive tourist zone aims to exceed the expectations of its target audience. The integration of an emergency response facility further enhances the desirability of the zone, promising an exclusive and worry-free experience for its privileged visitors. The exclusive tourist zone is divided into three parts, each with its own set of regulations and permissible activities. From luxurious multi-storied hotels and eco-resorts to a wide range of beach-related amenities, the zones cater to diverse preferences and provide a memorable experience for visitors. Accessible through multiple routes and with additional transport options available, the exclusive tourist zone aims to deliver exceptional hospitality and unforgettable moments to all who visit.

- Exclusive Tourist Zone 01: Covering an area of 191.94 Acres, this zone allows for the construction of multi-storied buildings, including prestigious 5-star hotels and other luxurious setups. The focus here is on providing high-end accommodations and upscale facilities to cater to the needs of discerning guests.
- Exclusive Tourist Zone 02: Spanning across 264.02 Acres, this zone permits the construction limited to three stories. It is primarily dedicated to hosting luxurious eco-resorts and exclusive tourist facilities. The emphasis in Zone 02 is on sustainability and harmonious integration with the surrounding natural environment.
- Exclusive Tourist Zone 03: Encompassing an area of 274.32 Acres, Zone 03 takes a different approach by prohibiting permanent structure. Instead, it prioritizes a range of beach-related activities and services that allow visitors to fully embrace the beach vibe. This zone permits a plethora of beachfront activities, private beach access, beachside dining options, water sports and activities, beach clubs, beach yoga and meditation sessions, beach bonfire and BBQ areas, personalized services, sunset viewing points, beachside bars and lounges, private beach cabanas, waterfront dining experiences, beach butler service, beachside spa treatments, beach volleyball and sports facilities, beachside entertainment and live music, beachfront shopping, beach photography and videography services, and kid's play areas and activities. This ensures a comprehensive and enjoyable beach vacation experience for visitors.

To access the exclusive tourist zones, visitors can use the Beribadh road and the marine drive, which one they prefer. Moreover, to enhance accessibility, the zone features a sea plane landing platform and a helipad, offering additional transportation options and the opportunity to enjoy breath-taking aerial views.



6.2 Action Plan for Planned Development Zone

The Planned Development Zone, spanning a spacious 144.46 acres, is set to undergo a remarkable transformation. With a focus on holistic development, the key proposals for this area promise to enhance infrastructure, tourism, cultural heritage, healthcare, and recreational facilities. This ambitious vision aims to create a vibrant and thriving community that caters to the needs of residents and tourists alike.

Bangabandhu Square

At the heart of the development plan lies the proposed Bangabandhu Square, a fitting tribute to the esteemed founding father of Bangladesh, Sheikh Mujibur Rahman. This public space will serve as a gathering point and symbolize the area's rich historical significance. A statue of the Father of the nation will be placed at the centre of the square.

Tourism Police Station, Fire Station & Expansion of Existing Hospital

Recognizing the importance of safety and security, the plan includes the establishment of a dedicated Tourism Police Station in this zone. It also includes the construction of a Fire Service Station for emergency response along with expansion of existing hospital with enhanced medical facilities to cater the growing health care need.

Payra Kuakata Development Authority (PKDA) Office

Payra Kuakata Development authority is waiting for the approval from the national assembly of Bangladesh. It will be key authority to promote & control the development in this region. The PKDA office will be established in this zone.

Cultural History Museum & Amphitheatre

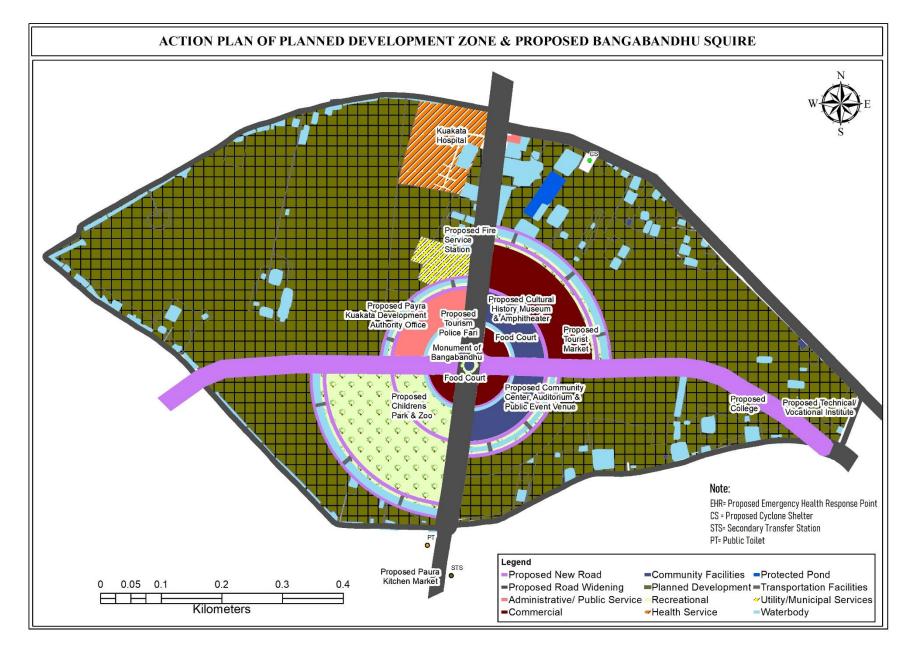
Preserving the cultural heritage of the area, the plan includes the creation of a Cultural History Museum. This museum will showcase the rich traditions and history of the region. Additionally, an Amphitheatre will provide a platform for cultural events and performances, fostering community engagement and artistic expression.

Proposed Community Centre, Auditorium & Public Event Venue

To foster a sense of community and provide recreational facilities, the proposal includes the construction of a Community Centre and Auditorium. These versatile spaces will host a range of public events, gatherings, and cultural activities, strengthening social bonds and promoting civic participation.

Besides the above-mentioned proposal there are some other proposal in this Zone. Those are as follows;

- Tourist Market
- o Children's Park & Zoo
- Technical/Vocational Institute
- o Higher Secondary College



6.3 Action Plan for Beach Activity Zone

The Beach Activity Zone (BAZ) has been segmented into three different area (BAZ 01, BAZ 02 & BAZ 03) containing approximately 76-acre land. These zones aim to provide tourists and locals alike with a unique recreational experience at the proximity to the sea.

BAZ 01: Open Space Area

It is the primary beach entrance with 10ac land. To capitalize its scenic beauty and ensure unobstructed beach entry for tourists. This area is designated for beach-centric recreational activities, that will encourage visitors to indulge in sports, fostering a lively and active beach atmosphere. To cater the needs of beachgoers, shaded structures like umbrellas & canopies will be installed. Additionally, seating arrangements in the form of benches and picnic tables will be strategically placed for relaxation and socialization. Waste bins will be thoughtfully positioned, promoting responsible waste disposal. Regular cleaning and maintenance will ensure a clean and pristine environment. Clearly visible signboards will outline beach rules, safety guidelines, and emergency contact information. Moreover, designated pathways and beach access points will facilitate easy movement for visitors.

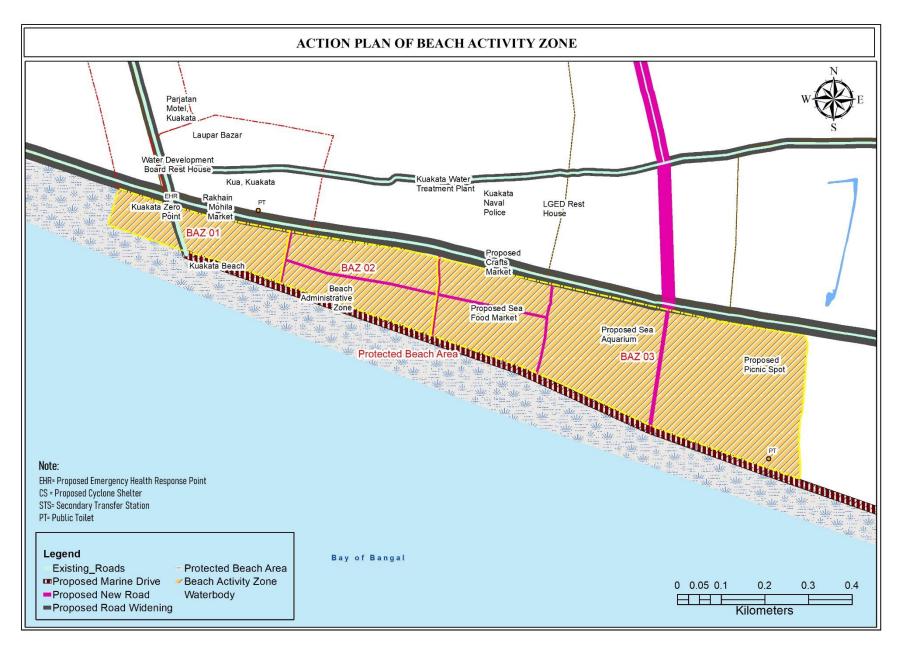
BAZ 02: Beach Administration Area

Beach Administrative Area, will act as a hub for administrative functions. The temporary office of beach protection committee is situated here. A modern Beach Administrative Area needs an information desk, a tourism police booth, small auditorium capable of hosting administrative seminars and events, office of the Beach Protection Committee & Beach volunteers along with security tower to monitor the tourist movement. There is a lake in this area; It needs to be transformed into a picturesque landscape. Lush greenery, including trees, flowers, and ornamental plants. Proper lighting will be installed to ensure safety during evening hours, encouraging visitors to enjoy the lake area even after sunset.

BAZ 03: Other Beach Activity Area

BAZ 03 will cater to an array of recreational activities, creating a vibrant and diverse beach experience. The proposals include:

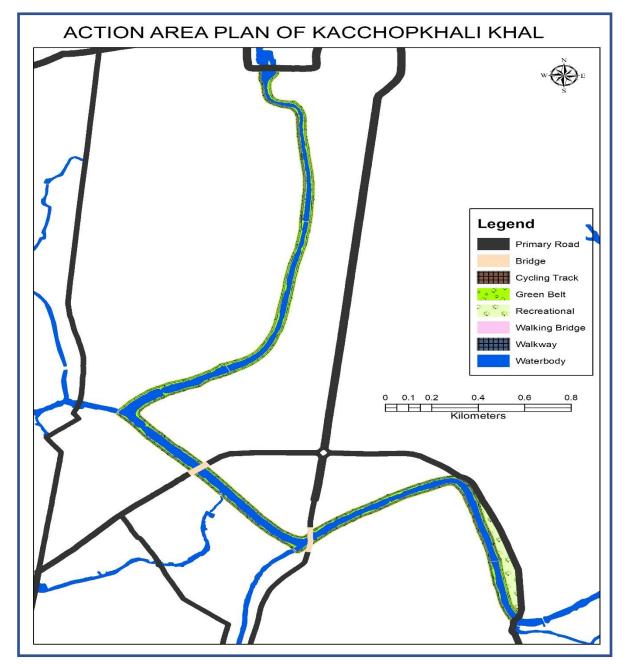
- Seafood & Crafts Market: A designated 7 acres land will be allocated for sea food market where one can enjoy sea food with sea vibe. Local artisans will be provided with a dedicated 5 ac land to display and sell their exquisite handmade crafts, fostering cultural exchange and appreciation.
- Picnic Spot & Sea Aquarium: Thoughtfully designed picnic areas with picnic tables, benches, and barbecue pits will facilitate unforgettable outdoor dining and family gatherings. Almost 24.5 acres of land has been allocated for this purpose. For showcasing marine life and fostering awareness about ocean conservation almost 15.5 acres of land has been allocated for Sea aquarium.
- Public Toilet Facilities: To ensure comfort and convenience clean and well-maintained public toilet facilities need to be installed.
- Access Roads: Existing access roads will be improved, and new ones will be constructed to ensure easy and convenient mobility to the beach activity zone.



Map 6.3: Action Plan for Beach Activity Zone

6.4 Action plan of Kocchopkhali Khal

Kocchopkhali Canal is one of the major canal streams of Kuakata Tourism Area. Exploring its potentiality by beautification and providing relevant facilities will add another dimension to the existing tourism destination. Redecoration and beautification may include green belt around the canal in both sides followed by 10 feet wide walkway coupled with 10 feet additional cycling lane on both sides of the canal, sitting arrangement throughout the greenbelt, boat ghat at random interval throughout the canal for exciting boat journey experience for tourists, lucrative bridges connecting both sides, mobile food vans and small restaurants, clean drinking water booth at regular intervals, waste collection bins at every 100 meter interval, selfie corners randomly distributed alongside the canal bank.



Map 6.4: Action Plan of Kochchopkhali khal

6.5 Ward Action Plan of Kuakata Pourashava

Kuakata pourashava started its journey at 2010 with 9 wards & 9177 nos population containing with 5.02 sqkm area. The present population is 13657; the projected population by 2031 will be 17322 & by 2041 it will be 21395. By considering the demand of municipal population & number of daily tourists, Ward Action Plan & land use proposal of each ward has been fixed up.

6.5.1 Action Plan of Ward No. 01

General Information

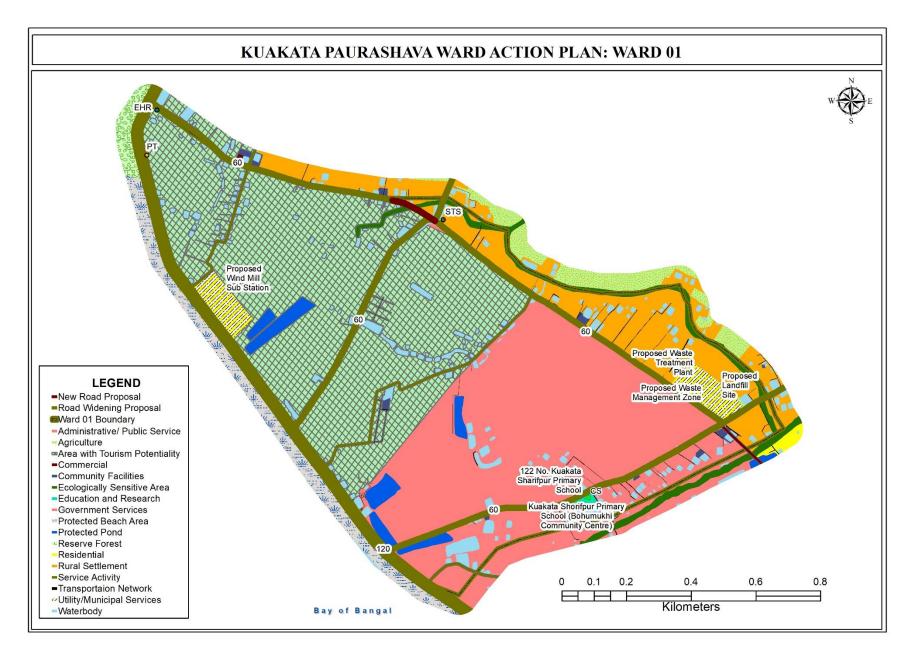
- Approximate Area is 356.22 acre
- Present population 1,224 nos (BBS, 2022)
- Projected Population will be 2,083 nos (2041)
- Located at the western part (close to leburbon)

Significant Proposal

- Wind Mill Sub-Station
- Waste Treatment Plant
- Road Widening
- Secondary Transfer Station
- Emergency Health Response Point
- Public Toilet Facilities

Land use Proposal

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 115.32 | 32.54 |
| Agriculture | 0.09 | 0.03 |
| Area with Tourism Potentiality | 142.38 | 40.18 |
| Commercial | 0.00 | 0.00 |
| Community Facilities | 0.87 | 0.24 |
| Ecologically Sensitive Area | 5.25 | 1.48 |
| Education and Research | 0.52 | 0.15 |
| Protected Pond | 7.61 | 2.15 |
| Residential | 0.01 | 0.00 |
| Rural Settlement | 28.17 | 7.95 |
| Service Activity | 0.03 | 0.01 |
| Transportaion Network | 25.47 | 7.19 |
| Utility/Municipal Services | 8.66 | 2.44 |
| Waterbody | 19.99 | 5.64 |
| Total | 356.22 | 100.00 |



Map 6.5: Action Plan of Ward no. 01

6.5.2 Action Plan of Ward No. 02

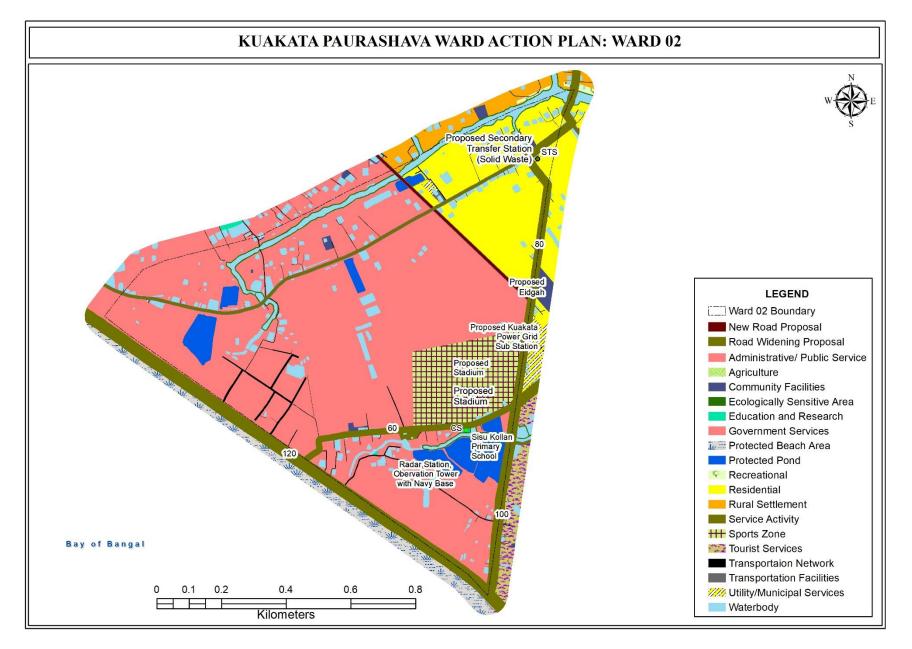
General Trend

- Approximate Area: 267.81 acre
- Present population: 1,046 nos (BBS, 2022)
- Projected Population: 1,905 nos (2041)
- Proximity to Beach Area

Significant Proposal

- Cricket Stadium
- Road Widening
- Protected Pond
- New Access Road
- Secondary Transfer Station
- Radar Station & Naval Base

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 20.38 | 7.61 |
| Community Facilities | 0.65 | 0.24 |
| Ecologically Sensitive Area | 10.38 | 3.87 |
| Education and Research | 0.10 | 0.04 |
| Government Services | 140.99 | 52.64 |
| Protected Pond | 11.26 | 4.20 |
| Residential | 30.90 | 11.54 |
| Rural Settlement | 0.12 | 0.05 |
| Service Activity | 0.30 | 0.11 |
| Sports Zone | 18.96 | 7.08 |
| Transportation Network | 15.26 | 5.70 |
| Transportation Facilities | 0.11 | 0.04 |
| Utility/Municipal Services | 0.36 | 0.13 |
| Waterbody | 18.05 | 6.74 |
| Total | 267.81 | 100.00 |



6.5.3 Action Plan of Ward No. 03

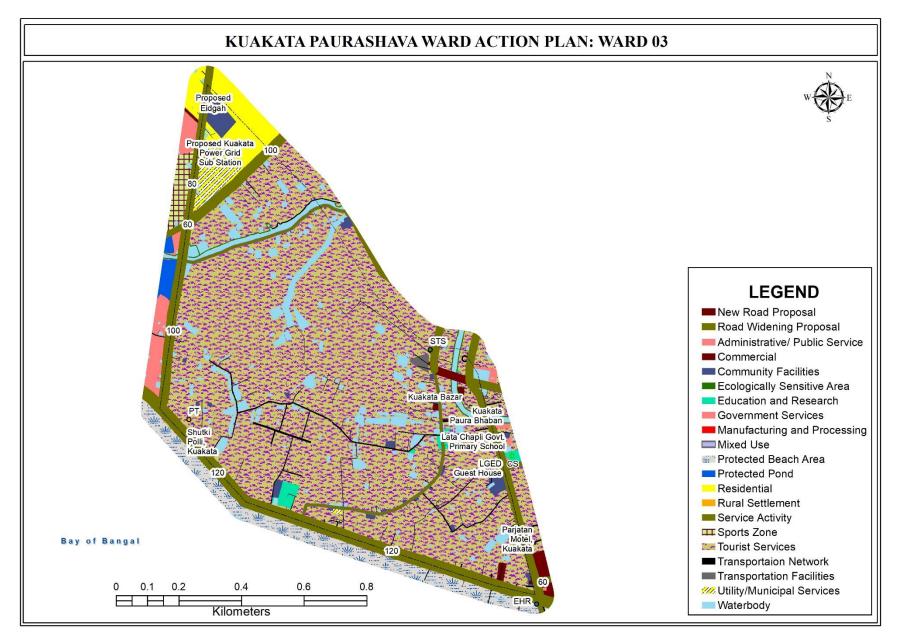
General Trend

- Approximate Area is 243.09 acre
- Present population: 1,956 nos (BBS, 2022)
- Projected Population: 2,815nos (2041)
- Proximity to the Beach Area
- Mainly Tourist Service Area
- Located at the centre of Kuakata pourashava

Significant Proposal

- Eidgah
- Power grid sub-station
- Road Widening
- Secondary Transfer Station
- Emergency Health Response Point
- Public Toilet Facilities
- Cyclone Shelter

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 0.07 | 0.03 |
| Commercial | 0.63 | 0.26 |
| Community Facilities | 4.00 | 1.64 |
| Ecologically Sensitive Area | 4.77 | 1.96 |
| Education and Research | 1.44 | 0.59 |
| Residential | 3.90 | 1.61 |
| Tourist Services | 181.54 | 74.68 |
| Transportation Network | 22.24 | 9.15 |
| Transportation Facilities | 0.46 | 0.19 |
| Utility/Municipal Services | 4.57 | 1.88 |
| Waterbody | 19.48 | 8.01 |
| Total | 243.09 | 100.00 |



Map 6.7: Action Plan of Ward no. 03

6.5.4 Action Plan of Ward No. 04

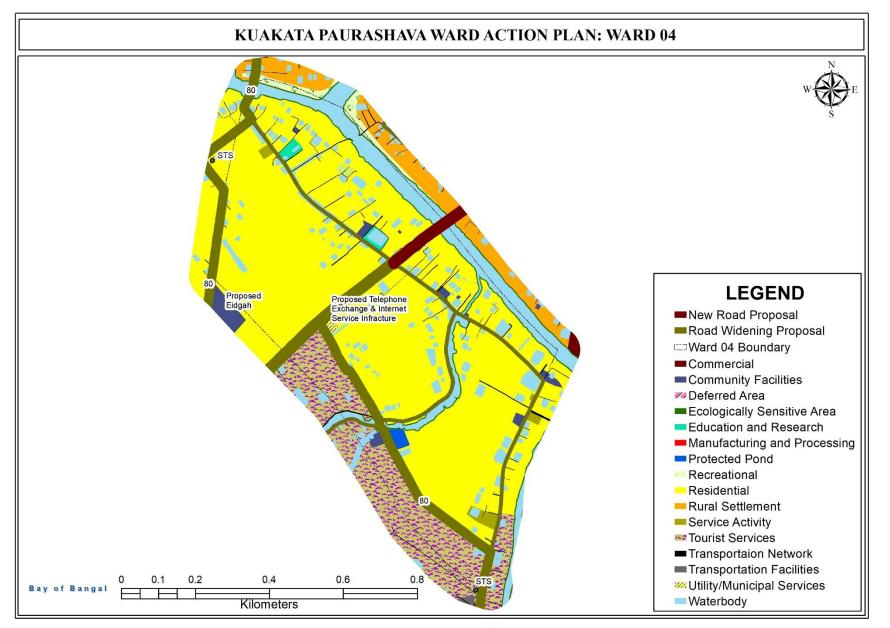
General Trend

- Approximate Area is 166.5 acre
- Present population:1,514 nos (BBS, 2022)
- Projected Population: 2,373nos (2041)
- Proximity to the Beach Area
- Mainly Residential Area
- Located at the centre of Kuakata pourashava

Significant Proposal

- Eidgah
- Telephone exchange and internet service infrastructure
- Road Widening
- Protected Pond
- New Road
- Secondary Transfer Station

| Proposed Land Use | Area in Acre | Percentage |
|------------------------------|--------------|------------|
| Community Facilities | 1.07 | 0.64 |
| Ecologically Sensitive Area | 12.93 | 7.77 |
| Education and Research | 0.68 | 0.41 |
| Manufacturing and Processing | 0.00 | 0.00 |
| Protected Pond | 0.48 | 0.29 |
| Recreational | 0.62 | 0.37 |
| Residential | 104.87 | 62.98 |
| Rural Settlement | 0.00 | 0.00 |
| Service Activity | 0.91 | 0.54 |
| Tourist Services | 12.12 | 7.28 |
| Transportation Network | 13.63 | 8.19 |
| Utility/Municipal Services | 0.21 | 0.12 |
| Waterbody | 18.99 | 11.41 |
| Total | 166.51 | 100.00 |



Map 6.8: Action Plan of Ward no. 04

6.5.5 Action Plan of Ward No. 05

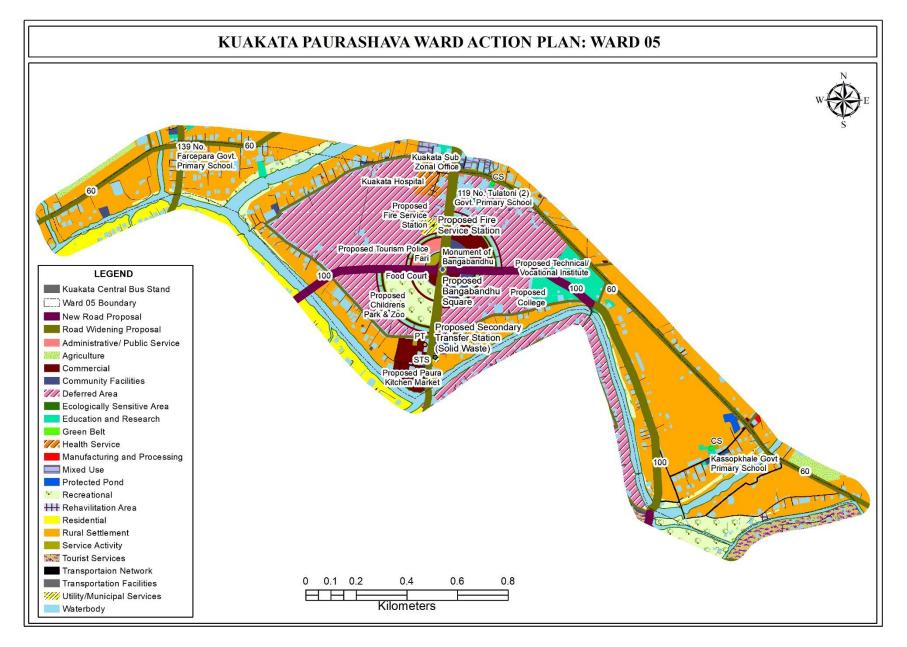
General Trend

- Approximate Area 368.79 acres
- Present population 1,189 nos (BBS, 2022) & Projected Population 2,048nos (2041)
- Located at the entry point of Kuakata municipality

Significant Proposal

- Bangabandhu Square
- Tourism Police station & Fire Service Station
- Government Hospital Extension
- Payra Kuakata Development Authority Office
- Cultural History Museum & Amphitheatre
- Community Centre, Auditorium & Public Event Venue
- Tourist Market, Food court, Bypass road & Paurashava Kitchen Market
- Children's Park, Zoo & Technical/ Vocational Institute & Higher Secondary College

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 1.69 | 0.46 |
| Agriculture | 0.01 | 0.00 |
| Commercial | 9.93 | 2.69 |
| Community Facilities | 4.39 | 1.19 |
| Deferred Area | 81.58 | 22.12 |
| Ecologically Sensitive Area | 27.36 | 7.42 |
| Education and Research | 9.67 | 2.62 |
| Green Belt | 2.82 | 0.76 |
| Health Service | 3.60 | 0.98 |
| Manufacturing and Processing | 0.02 | 0.00 |
| Mixed Use | 0.03 | 0.01 |
| Protected Pond | 1.98 | 0.54 |
| Recreational | 18.96 | 5.14 |
| Rehabilitation Area | 0.14 | 0.04 |
| Residential | 0.01 | 0.00 |
| Rural Settlement | 116.25 | 31.52 |
| Service Activity | 0.69 | 0.19 |
| Transportation Network | 41.65 | 11.30 |
| Transportation Facilities | 0.74 | 0.20 |
| Utility/Municipal Services | 1.48 | 0.40 |
| Waterbody | 45.80 | 12.42 |
| Total | 368.79 | 100.00 |



Map 6.9: Action Plan of Ward no. 05

6.5.6 Action Plan of Ward No. 06

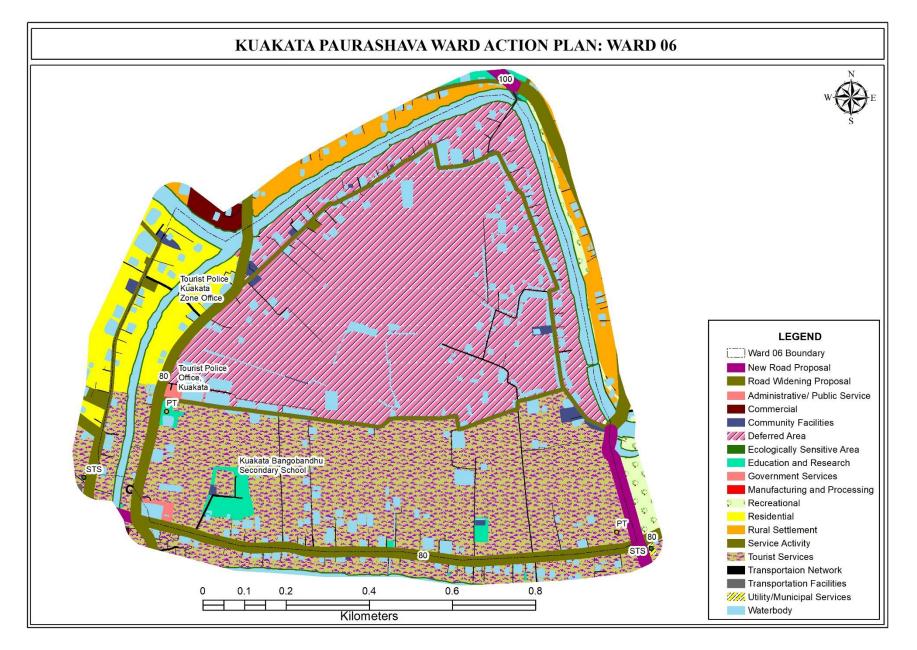
General Trend

- Approximate Area is 264.68 acres
- Present population: 1,643 nos (BBS, 2022)
- Projected Population: 2,502nos (2041)
- Potential area for urban use

Significant Proposal

- Tourist Service Zone
- Deferred Area
- Secondary Transfer Station
- Widening of road
- Public Toilet Facilities

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 0.82 | 0.31 |
| Community Facilities | 1.62 | 0.61 |
| Deferred Area | 109.10 | 41.22 |
| Ecologically Sensitive Area | 14.13 | 5.34 |
| Education and Research | 2.99 | 1.13 |
| Government Services | 0.01 | 0.01 |
| Manufacturing and Processing | 0.00 | 0.00 |
| Recreational | 0.06 | 0.02 |
| Residential | 10.74 | 4.06 |
| Service Activity | 0.34 | 0.13 |
| Tourist Services | 79.01 | 29.85 |
| Transportation Network | 14.46 | 5.46 |
| Transportation Facilities | 0.45 | 0.17 |
| Waterbody | 30.95 | 11.69 |
| Total | 264.68 | 100.00 |



Map 6.10: Action Plan of Ward no. 06

6.5.7 Action Plan of Ward No. 07

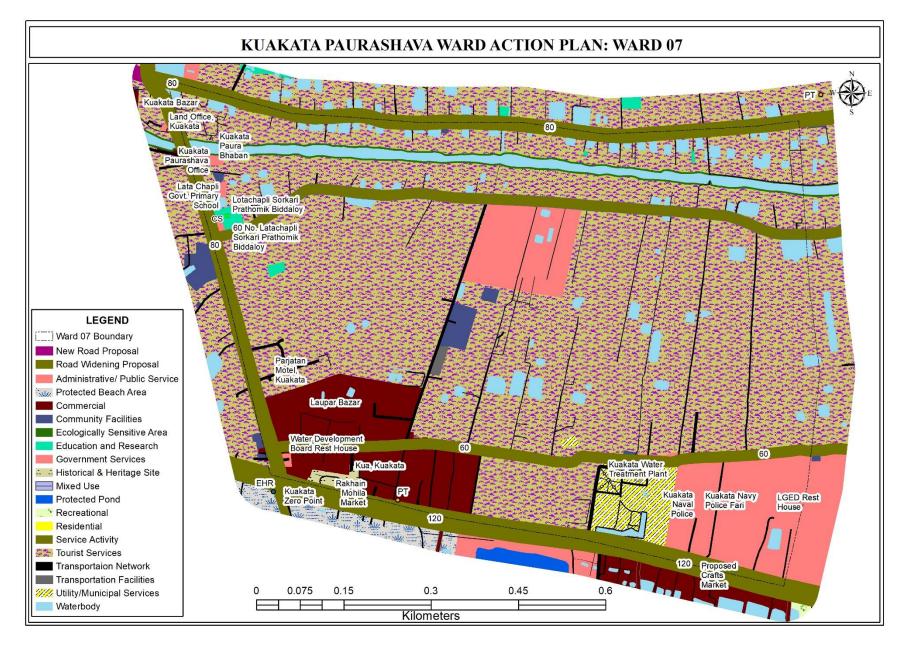
General Trend

- Approximate Area :178.41 acres
- Present population:1,941 nos (BBS, 2022)
- Projected Population: 2,800 nos (2041)
- Proximity to Beach Area
- Mainly Tourist Service Area
- Located at the Centre of Kuakata pourashava

Significant Proposal

- Expansion of Water Treatment Plant
- Tourist Service Zone
- Designated Commercial Area
- Secondary Transfer Station
- Widening of Roads
- Public Toilet Facilities
- Cyclone Shelter & Emergency Health Response Point

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 15.64 | 8.77 |
| Commercial | 11.17 | 6.26 |
| Community Facilities | 1.06 | 0.59 |
| Ecologically Sensitive Area | 6.84 | 3.83 |
| Education and Research | 0.56 | 0.31 |
| Government Services | 0.02 | 0.01 |
| Historical & Heritage Site | 0.50 | 0.28 |
| Protected Pond | 0.00 | 0.00 |
| Residential | 0.01 | 0.00 |
| Tourist Services | 107.48 | 60.24 |
| Transportation Network | 21.33 | 11.95 |
| Transportation Facilities | 0.19 | 0.11 |
| Utility/Municipal Services | 3.44 | 1.93 |
| Waterbody | 10.17 | 5.70 |
| Total | 178.41 | 100.00 |



Map 6.11: Action Plan of Ward no. 07

6.5.8 Action Plan of Ward No. 08

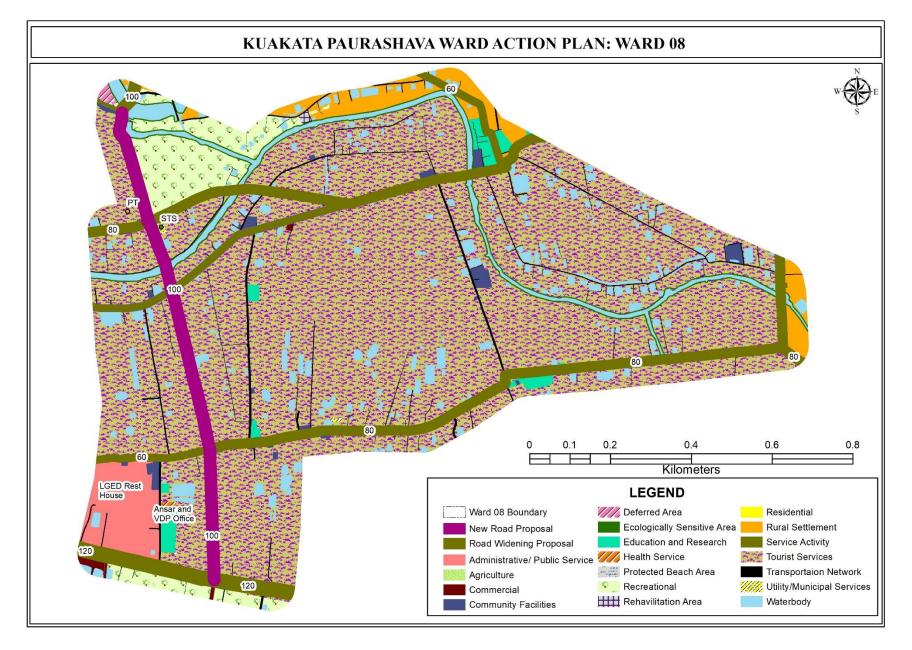
General Trend

- Approximate Area is 276.32 acres
- Present population:1,479 nos (BBS, 2022)
- Projected Population: 2,338 nos (2041)
- Mainly Tourist Service Area
- Located at the Eastern part of Kuakata pourashava

Significant Proposal

- Community Park
- Tourist Service Zone
- Widening of Roads
- Secondary Transfer Station
- Public Toilet Facilities

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Administrative/ Public Service | 6.03 | 2.18 |
| Commercial | 0.07 | 0.03 |
| Community Facilities | 1.92 | 0.70 |
| Ecologically Sensitive Area | 12.76 | 4.62 |
| Education and Research | 2.43 | 0.88 |
| Health Service | 0.22 | 0.08 |
| Recreational | 8.61 | 3.12 |
| Rehabilitation Area | 0.01 | 0.00 |
| Residential | 0.01 | 0.00 |
| Rural Settlement | 0.07 | 0.02 |
| Tourist Services | 197.40 | 71.44 |
| Transportation Network | 27.20 | 9.84 |
| Utility/Municipal Services | 0.18 | 0.07 |
| Waterbody | 19.41 | 7.02 |
| Total | 276.32 | 100.00 |



5.4.9 Action Plan of Ward No. 09

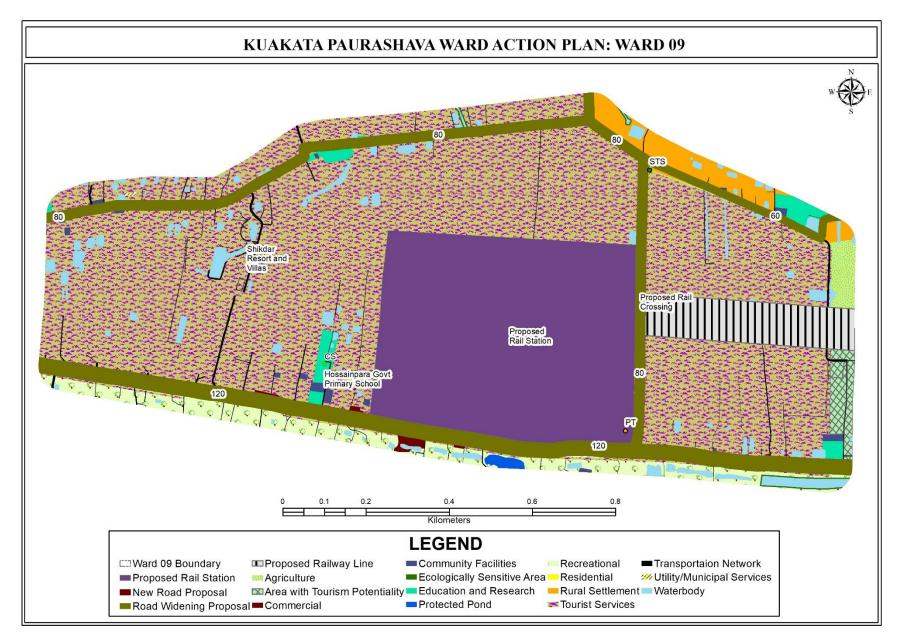
General Trend

- Approximate Area:279.30 acres
- Present population: 1665 nos (BBS, 2022)
- Projected Population: 2524 nos (2041)
- Proximity to Open space & Greenery Zone
- Mainly Tourist Service Area
- Located at Eastern Part of Kuakata pourashava

Significant Proposal

- Rail Station
- Rail Line
- Widening of Roads
- Tourist Service Zone
- Secondary Transfer Station
- Public Toilet Facilities
- Cyclone Shelter

| Proposed Land Use | Area in Acre | Percentage |
|--------------------------------|--------------|------------|
| Agriculture | 0.16 | 0.06 |
| Area with Tourism Potentiality | 0.02 | 0.01 |
| Commercial | 0.15 | 0.05 |
| Community Facilities | 0.75 | 0.27 |
| Education and Research | 2.28 | 0.82 |
| Residential | 0.00 | 0.00 |
| Rural Settlement | 0.13 | 0.05 |
| Tourist Services | 248.02 | 88.80 |
| Transportation Network | 20.54 | 7.36 |
| Utility/Municipal Services | 0.04 | 0.01 |
| Waterbody | 7.20 | 2.58 |
| Total | 279.30 | 100.00 |



Map 6.13: Action Plan of Ward no. 09

CHAPTER SEVEN: IMPLEMENTATION & COORDINATION

7.1 Need for an Authority

To promote the development along with control it for specific purpose there should have an authority to monitor the process. But in kuakata area there was no such authority to develop & coordinate the development. Kuakata municipality usued to do take small scheme within their jurisdiction. Again, KTC area is not limited to only Kuakata municipal area; it consists of entire Latachapli union, partly Dhulasar union along with the municipal boundary. As kuakata is a significant tourist spot, large number of hotels, motel is being established here & there. Kuakata municipality doesn't have that technical support to permit those large structure & control haphazard development. Again, various mega project like Payra port, Thermal powerplant in this region promoted haphazard development. By considering all this thing A Dedicated Development Authority of this area is badly needed. There was a suggestion of establishing 'Payra-Kuakta Development Authority' in earlier KTC master Plan as well. In continuation of that proposal government has taken initiatives to form the 'Payra-kuakata Development Authority'. The Payra Kuakata Development Authority Act,2023 (Draft Version) has been approved by MOPA. Now it is awaited to be The Payra Kuakata Development Authority Act,2023 if accepted by the 'Cabinet Division' & the 'National Assembly of Bangladesh.

Interim Authority

The ministry of public works has declared an interim authority headed by Divisional Commissioner of Barisal. This interim Committee will perform development promotion& control act according to Real Estate Development & Management Act, 2010 until there is no full fledge authority in operation.

| Divisional Commissioner of Barisal | Convenor |
|---|------------------|
| DIG Of Police, Barisal Range | Member |
| Deputy Commissioner (DC), Patuakhali | Member |
| Superintending Engineer, WDB, Patuakhali circle | Member |
| Executive Engineer, LGED, Patuakhali | Member |
| Executive Engineer, NHA, Khulna | Member |
| Senior Planner, UDD, Barishal | Member |
| Mayor, Kuakata Municipality | Member |
| Executive Engineer, PWD, Patuakhali | Member Secretary |

Table7.1: Structure of Interim Authority

7.2 Plan Implementation & Coordination Committee

There are a lot of proposal in KTC masterplan in terms of Development promotion & Development control in Kuakata. The specific organization will be responsible for implementing specific proposal according to the rules of business & working area of that particular department.

As the administrative head of Patuakhali district the Deputy commissioner of Patuakhali will have the authority to maintain the coordination & make the respective department at the field responsible to implement the development proposal. Therefore, a committee headed by Deputy Commissioner of Patuakhali can act as KTC Plan Implementation & Coordination Committee with the consent of Divisional Commissioner. The committee could be as follows;

| Deputy Commissioner (DC), Patuakhali | Convenor |
|---|------------------|
| Superintending Engineer, WDB, Patuakhali circle | Member |
| Executive Engineer, LGED, Patuakhali | Member |
| Executive Engineer, PWD, Patuakhali | Member |
| Deputy Director, DOE, Patuakhali | Member |
| Upazila Nirbahi Officer, Kalapara | Member |
| Asst. Commissioner (land), Kalapara | Member |
| Mayor, Kuakata Municipality | Member |
| Senior Planner, UDD, Patuakhali | Member Secretary |

Table 7.2 Structure of Plan Implementation & Coordination Committee

7.2.1 Building Permission & Land Use Clearance

After opening the Padma Bridge & other mega project in southern region kuakata has become a bird's eye of various investor & entrepreneur. The very common investment in KTC is making hotel, motel & related service, Because of high demand people used to construct structure here & there & don't even bother about proper permission from proper authority. Therefore, rapid urbanization & haphazard development is being taken place here & in Kuakata there is sturdy complexity in terms of land ownership.

To Control this kind of haphazard development & to promote synchronized development this KTC plan has made various development proposals & guidelines like Strategic Planning Zone (SPZ), building height restriction etc. All these guidelines & regulation of KTC along with existing act needs to needs to implemented otherwise it will not be able to help in the long run.

But as there is not a sole body to execute the KTC guidelines more specifically building permission & land use clearance as the 'Payra kuakata Development Authority' is not in operation. The interim authority headed by the Divisional Commissioner of Barisal needs to make a technical subcommittee by technical personnel from various department to ensure building permission & land use clearance considering the KTC Masterplan guidelines & other existing acts & Code. This is an interim solution; whenever the proper authority comes into operation it will own the responsibility.

The Technical subcommittee could be as follows;

| Deputy Commissioner (DC), Patuakhali | Convenor |
|--------------------------------------|------------------|
| Executive Engineer, LGED, Patuakhali | Member |
| Executive Engineer, PWD, Patuakhali | Member |
| Asst. Commissioner (land), Kalapara | Member |
| Mayor, Kuakata Municipality | Member |
| Architect appointed by IAB | Member |
| Senior Planner, UDD, Barishal | Member Secretary |

Table 7.3 Structure of Technical Sub Committee

7.3 Custodian of KTC Masterplan

The Urban Development Directorate (UDD) is the custodian of KTC master plan. If Payra kuakata Development authority forms they will take the custodian authority. At present urban Development Directorate (UDD) is responsible to clarify, explain, review & update of the plan.

7.4 Review & Updates of KTC

As Kuakata tourism Center is a significant tourism spot in the country. By considering the rapid urbanization & rapid changes this KTC masterplan has the provision of Updating itself by Five (05) years interval.

CHAPTER EIGHT: SUGGESTION & CONCLUSION

8.1 Conclusion

Kuakata Tourism Center (KTC) Area is not simply a small-town center; it's a combination of urban & rural intrinsic context with strong tourism effect. Therefore, Kuakata Tourism Center (KTC) master plan has equally considered the need for tourist people & for the local community or age-old residence here. Different stakeholders have been duly consulted during various phase of plan preparation. The plan has an integrated approach targeting the tourists as well of the local people's embodying tourism development as well as socio-economic development respectively. From this perspective, the plan is a unique work out of serving the dual purposes. This plan is also a nice blend of development promotion & development control mechanism. Various proposal has been given in this master plan to promote tourism & attract tourist to come in KTC at to strengthen local economy & create more job opportunities. As communication is the key nowadays so a well-connected transportation network has been proposed in consideration with the function of the road network & easier mobility to the local attraction point. This road network proposal has addressed the age-old issue of single entry to the sea by suggesting several 80 feet roads horizontally located with Dhaka-kuakta highway & vertically connects the sea veribadh. A marine drive proposal has also been given in this plan to enjoy the vibe of sea. Besides the transportation proposal this plan suggest various activity & physical infrastructure like Sea aquarium, Seafood market, Picnic spot, Golf Course, Stadium, Exclusive Tourist Zone & Eco-tourism & tourism Village zone and Park & Open Spaces etc.

Along with various promotional proposal this plan imposes some development control through Strategic Planning Zone (SPZ) in different parts of KTC area. To avoid horizontal development along the sea & Urban sprawl close to beach a height restriction from the sea shoreline has also been imposed into different parts of the area; such an example in Eco tourism & Tourism village zone the building height will be limited to two stories or equivalent. Again, a clear land use with the permissible & non permissible act in each Planning zone along with guidelines to protect the sea beach, reserve forest, agricultural land & ecologically sensitive area is also specified in this plan.

This Plan Well-thought-out the Padma bridge impact together with various development projects & upcoming mega projects in this region like six lane regional road, Railway line, airport etc. while calculating the number of tourist & required tourism-ecotourism services.

In conclusion it can be said & expected that this KTC master plan will act as a guiding principle in terms of development promotion & development control through proper implementation & Coordination in KTC area.